

## Unit : 05

### Interacting with database

1) The following classes belong to which package: Connection management, Database Access, Data Types, Database Metadata, Exceptions Warnings:

- a) javax.sql
- b) **java.sql**
- c) javax.swing
- d) None of the above

2) Which of the following classes/interface allows you to establish a connection to database:

- a) java.sql.Driver
- b) java.sql.DriverManager
- c) java.sql.connection
- d) **All of the above**

3) Which of the following classes/interface allows you to send SQL statement to database for execution and read the result:

- a) java.sql.Statement
- b) java.sql.PreparedStatement
- c) java.sql.ResultSet
- d) **All of the above**

4) What is the description of java.sql.DriverManager?

- a) **This class provides the functionality necessary for managing one or more database drivers.**
- b) This is an interface that abstracts the vendor specific connection protocol
- c) This class is used to discover properties required to obtain the connection
- d) This interface abstracts most of the interaction with the database.

5) What is the description of java.sql.Driver?

- a) This class provides the functionality necessary for managing one or more database drivers.
- b) **This is an interface that abstracts the vendor specific connection protocol**
- c) This class is used to discover properties required to obtain the connection
- d) This interface abstracts most of the interaction with the database

6) What is the description of java.sql.DriverPropertyInfo?

- a) This class provides the functionality necessary for managing one or more database drivers.
- b) This is an interface that abstracts the vendor specific connection protocol
- c) **This class is used to discover properties required to obtain the connection**

d) This interface abstracts most of the interaction with the database.

7) What is the description of java.sql.Connection?

- a) This class provides the functionality necessary for managing one or more database drivers.
- b) This is an interface that abstracts the vendor specific connection protocol
- c) This class is used to discover properties required to obtain the connection
- d) This interface abstracts most of the interaction with the database.**

8) Which interface lets you execute SQL statements over the underlying connection and access the results?

- a) java.sql.Statement**
- b) java.sql.PreparedStatement
- c) java.sql.ResultSet
- d) java.sql.CallableStatement

9) This interface lets you execute stored procedures.

- a) java.sql.Statement
- b) java.sql.PreparedStatement
- c) java.sql.ResultSet
- d) java.sql.CallableStatement**

10) The java.sql package provides several Java \_\_\_\_\_ class that correspond to some of the SQL types.

- a) Connection Management
- b) Database Access
- c) Data Types**
- d) Both (a) and (b)

11) Which interface is included in Data Types

- a) java.sql.Types
- b) java.sql.Date
- c) java.sql.Blob**
- d) All of the above

12) Which interface comes under DatabaseMetadata?

- a) java.sql.DatabaseMetadata
- b) java.sql.ResultSetMetaData
- c) Java.sql.ParameterMetadata
- d) All of the above**

13) Which of the following comes under SQL Exception and Warnings?

- a) java.sql.SQLException
- b) java.sql.SQLWarning
- c) java.sql.DataTruncation

d) **Both (b) and (c)**

14) Which of the following is/are characteristics of JDBC

(1) Supports a wide level of portability.

(2) Provides Java Interfaces that are compatible with Java Applications . These providers are also responsible for providing the driver services.

(3) Provides higher level APIs for application programmers. The JDBC API specification is used as an interface for the applications and DBMS.

(4)The JDBC call to a Java application is made by the SQL Statements. These statements are responsible for entire communication with the database.

a) **All of the above**

b) None of the above

c) Only 2,3 and 4

d) Only 1,2 and 3

15) Following is/are the packages for JDBC

a) java.sql

b) javax.sql

c) **Both a and b**

d) None of the above

16) Which of the following is not a function of JDBC

a) Allows Java programs to execute SQL Statements

b) Allows Java programs to retrieve the results of the SQL Statements

c) **Allows Java programs to manipulate the design of the application**

d) Allows Java programs to send user defined requests to the database

- 17) JDBC-ODBC Bridge can be availed by importing \_\_\_\_\_ package.
- a) java.sql
  - b) sun.jdbc.odbc**
  - c) java.jdbcodbc
  - d) None of the above
- 18) Which of the following is JDBC version was released with Java EE 6
- a) JDBC 2.0
  - b) JDBC 3.0
  - c) JDBC 4.0
  - d) JDBC 4.1**
- 19) JDBC API provides \_\_\_\_\_ and \_\_\_\_\_ to handle database specific call from users.
- a) methods, functions
  - b) classes, interfaces**
  - c) packages, classes
  - d) interfaces, packages
- 20) \_\_\_\_\_ has an important role in JDBC Architechtrue
- a) Driver
  - b) SqlData
  - c) DriverManager**
  - d) ResultSet

21) \_\_\_\_\_ refers to the bridge driver (JDBC-ODBC Bridge)

**a. Type-1 Driver**

b. Type-2 Driver

c. Type-3 Driver

d. Type-4 Driver

22) \_\_\_\_\_ refers to a partly java and partly native code driver

a. Type-1 Driver

b. Type-2 Driver

**c. Type-3 Driver**

d. Type-4 Driver

23) \_\_\_\_\_ refers to pure Java Driver that uses a middleware driver to connect to a database

a. Type-1 Driver

b. Type-2 Driver

**c. Type-3 Driver**

d. Type-4 Driver

24) \_\_\_\_\_ refers to pure Java Driver which is directly connected to a database

a. Type-1 Driver

b. Type-2 Driver

c. Type-3 Driver

**d. Type-4 Driver**

25) OCI stands for \_\_\_\_\_

- a. Order Command Interface
- b. Oracle Call Interface**
- c. Operation Command Interface
- d. Open Command Interface

26) Which of the following is not the component of 3-tier architecture of JDBC

- a. DataSource Object**
- b. Java Application
- c. Java API
- d. Database

27) The javax.sql provides ..... implementations which are used in building server-side applications.

- a. JNDI-based lookup to access databases via logical names
- b. Connection Pooling
- c. Distributed transaction
- d. The RowSet
- e. all of the above**

28) The javax.sql package is used to develop the client/server sided applications and provide server sided extension facilities. State the statement is true or false.

- a. True**
- b. False

29) Using which classes and interfaces of javax.sql package we can establish and manage connection with the data source?

- a. Only DataSource
- b. DataSource and DataManager
- c. DataSource and DriverManager**
- d. Only DriverManager

30) The ..... package provides a transparent meaning of connection pooling.

- a. javax.swing
- b. javax.servlet
- c. javax.sql**
- d. java.io.sql

31) ..... implementation are provided by the driver vendor.

- a. DataSource**
- b. DataManager
- c. DriverManager.
- d. None

32) The ..... Naming service is used to provide a logical name for the DataSource to make a connection.

- a. Java Database Connectivity (JDBC)
- b. Java Naming and Directory Interface (JNDI)**
- c. Open Database Connectivity (ODBC)
- d. Domain Name Server

33) DataSource object can be implemented to work with.....

- a. three tier infrastructure
- b. two tier infrastructure
- c. middle tier infrastructure**
- d. none

34) State true or false

“ Connection Pooling means that the connection is reused rather than created each time when it is requested.”

- a True**

b. false

35) ..... Sub class of statement interface.

a. Statement Interface

**b. PreparedStatement Interface**

c. CallableStatement Interface

d. PreparedStatement Class

36) Which method is invoked on the statement object by p-assing the SQL statements as parameter.

a. getXXX()

b. setXXX()

**c. executeXXX()**

d. All of the Above

37) ..... can be used to represent a precompiled query , which can be executed multiple times.

a. Statement Interface

**b. PreparedStatement Interface**

c. CallableStatement Interface

d. PreparedStatement Class

38) The excute method ..... while using the PreparedStatement objects.

a. takes nth number of parameters.

b. takes only one parameters.

**c. do no takes any parametrs.**

d. none of the above.



39) Which method is of the connection object is used to get the object of the PreparedStatement interface?

- a. executeStatement()
- b. updateStatement()
- c. preparedStatement()**
- d. getStatement()

40) Which method is of the PreparedStatement object are used to set the parametrs of the SQL statements.

- a. getXXX()
- b. setParameter()
- c.setPath()
- d. setXXX()**

41) We can execute the precompiled SQL statements by using

- a. execute()
- b. executeUpdate()
- c. executeQuery()
- d. all of the above**

42) javax.sql package is also called as \_\_\_\_\_.

- a.JDBC extension API**
- b. API
- c.JDBC extension
- d. none of the above

43) The javax.sql.DataSource interface represents \_\_\_\_\_ related to java application

- a. data sources**
- b. data packets
- c. socket
- d. all of the above

44) The `javax.sql.CommonDataSource` provides the methods that are common between \_\_\_\_\_ interfaces

a) **DataSource, XADataSource, ConnectionPoolDataSource**

b) `Data.XADataSource, ConnectionPoolDataSource`

c) `Source.XADataSource, ConnectionPoolDataSource`

d) `source.xdatasource, connectionpoll`

45) Connections made by using \_\_\_\_\_ objects are implemented on the middle-tier connection pool.

a) **DataSource**

b) `datasource`

c) `datasource`

d) none of the above

46) \_\_\_\_\_ provides a factory for `PooledConnection` objects.

a) **`javax.sql.ConnectionPoolDataSource`**

b) `java.sql.ConnectionPoolDataSource`

c) `javax.sqlConnectionPoolDataSource`

d) `javax.sql, ConnectionPoolDataSource`

47) \_\_\_\_\_ provides an object to manage connection pools.

a) `javax.sql.ConnectionPoolDataSource`

b) **`javax.sql.PooledConnectionInterface`**

c) `javax.sqlConnectionPoolDataSource`

d) `javax.sql, ConnectionPoolDataSource`

48) `DriverManager` is a ..... class in JDBC API.

- a) Abstract
- b) **Non-Abstract**
- c) main
- d) none of the above

49) How many constructor are in the DriverManager Class?

- a) **One**
- b) two
- c) three
- d) four

50) What is the Driver Interface used for?

- a) To create Database Object that provide and entry point for database connectivity
- b) to contains the results of executing an SQL query.
- c) **To create Connection Object that provide an entry point for database connectivity.**
- d) none

51) What is connection interface?

- a) **It is a standard type that defines an abstraction to access the session established with database server.**
- b) It is used to create Connection Object that provides an entry point for database connectivity.
- c) both a and b
- d) none of the above

52) The Connection interface provides methods to handle

- a) ResultSet Object

- b) **Connection Object**
- c) PreparedStatement Object
- d) none of the above.

53) What does the Statement interface return?

- a) ResultSet Object
- b) **Connection Object**
- c) PreparedStatement Object
- d) None of the above

54) How many times the query is compiled when used PreparedStatement?

- a) **once**
- b) twice
- c) thrice
- d) quadruple

55) How to create an object and execute a query in PreparedStatement?

- a) PreparedStatement stmt=new PreparedStatement("insert into Emp values(a,b)");
- b) **PreparedStatement stmt=con.prepareStatement("insert into Emp values(a,b)");**
- c) PreparedStatement stmt=con.prepareStatement("insert into Emp values(a,b)");
- d) none of the above

56) Syntax for ResultSet:

- a) ResultSet rs=new ResultSet("Query-to-be-executed");
- b) resultset rs=stmt.executeQuery("Query-to-be-executed");
- c) **ResultSet rs=stmt.executeQuery("Query-to-be-executed");**

d) None of the above

57) What is "jdbc:mysql://localhost:3306/sonoo","root","root"

a) **path to the database**

b) driver location

c) both a and b

d) None of the above

58) Steps for jdbc:

(i) Closing the connection

(ii) Executing SQL statements

(iii) Obtaining a connection

(iv) Creating a JDBC Statement object

a) i, ii, iii, iv

b) ii, iii, iv, i

c) **iii, iv, ii, i**

d) iii, ii, iv, i

59) Path for Data Sources(ODBC):

a) start->control panel -> system and security -> data sources

b) **start ->control panel->system and security->administrative tools->data sources**

c) start->control panel->data sources

d) start->accessories->data sources

60) Which driver is required for ODBC connectivity

a) MicrosoftODBCForOracle

b) **MicrosoftODBCforOracle**

c) MicrosoftOdbcForOracle

d) MicrosoftOdbcforOracle

61) A Java program cannot directly communicate with an ODBC driver because .....

a) **ODBC written in C language**

b) ODBC written in C# language

c) ODBC written in C++ language

d) ODBC written in Basic language

62) The JDBC-ODBC Bridge driver translates the JDBC API to the ODBC API and used with \_\_\_\_\_

a) JDBC drivers

b) ODBC drivers

c) **Both A and B**

d) None of the above

63) The ..... package contains classes that help in connecting to a database, sending SQL statements to the database, and processing the query results.

a) connection.sql

b) db.sql

c) pkg.sql

d) **java.sql**

64) The ..... method executes a simple query and returns a singleResult Set object.

a) executeUpdate()

b) **executeQuery()**

c) execute()

d) noexecute()

- 65) The ..... method executes an SQL statement that may return multiple results.
- a) executeUpdate()
  - b) executeQuery()
  - c) **execute()**
  - d) noexecute()
- 66) The ..... object allows you to execute parametrized queries.
- a) ResultSet
  - b) Parametrized
  - c) **PreparedStatement**
  - d) Condition
- 67) The ..... object provides you with methods to access data from the table.
- a) **ResultSet**
  - b) Parametrized
  - c) TableStatement
  - d) Condition
- 68) The parameters of the PreparedStatement object are ..... when the user clicks on the Query button.
- a) **initialized**
  - b) started
  - c) paused
  - d) stopped
- 69) The ..... method sets the query parameters of the PreparedStatement Object.
- a) putString()
  - b) insertString()
  - c) **setString()**
  - d) setToString()
- 70) Connection object can be initialized using the ..... method of the Driver Manager class.
- a) putConnection()
  - b) setConnection()
  - c) Connection()
  - d) **getConnection()**

71) Which of the following statements is false as different type of statements is concern in JDBC?

- a)Regular Statement
- b)Prepared Statement
- c)Callable Statement
- d)Interim Statement**

72) JDBC-ODBC bridge supports multiple concurrent open statements per connection?

- a)True
- b)False**

73) Which driver is efficient and always preferable for using JDBC application:

- a)Type – 4**
- b)Type – 1
- c)Type – 3
- d)Type – 2

74) A Java program cannot directly communicate with an ODBC driver because

- a) Statement is wrong
- b) ODBC written in C language**
- c) ODBC written in high level language
- d) None of above

75) Abbreviate the term DSN

- a) Data Source Name**
- b) Data Server name
- c) Database Server Name
- d) Data String Name

76) API stands for

- a)Applet Program Interface
- b)Application Program Interface**
- c)Application procedure Interface
- d) None of above

77) API which controls access to the row result of a given Statement and holds data retrieved from a database after you execute an SQL query using Statement objects.



- a) java.Sql
- b) java.ResultSet
- c) Java.sql

d) **java.sql.ResultSet**

78) Application Server used in \_\_\_\_\_.

- a) **Three-Tier Mode**
- b) Two-Tier Mode
- c) Multi-Tier Mode
- d) Single-Tier Mode

79) Backbone of JDBC Architecture is \_\_\_\_\_

- a) **Driver Manager**
- b) Database Manager
- c) Statement Interface
- d) Resultset Interface

80) Which method is used to modify stored data

- a) execute()
- b) executeQuery()
- c) **executeUpdate()**
- d) executeResult()

81) How many transaction isolation levels are defined in sql.connection interface?

- a) 4
- b) 3
- c) **5**
- d) 2

82) Which of the following is false as type 4 driver is concern

- a) Type 4 driver is “native protocol, pure java” driver
- b) Type 4 drivers are 100% Java compatible
- c) Type 4 drivers uses Socket class to connect to the database
- d) **Type 4 drivers can not be used with Netscape**

83) All raw data types should be read and uploaded to the database as an array of :

- a) **byte**
- b) int
- c) boolean
- d) char

84) Which method is used to perform DML statements in JDBC

- a) execute()
- b) executeQuery()
- c) **executeUpdate()**
- d) None of above

85) JDBC stands for:

- a) **Java Database Connectivity**
- b) Java Database Components
- c) Java Database Control
- d) None of the above is correct.

86) The ..... method executes a simple query and returns a single Result Set object.

- a) executeUpdate()
- b) **executeQuery()**
- c) execute()
- d) noexecute()

87) The ..... object allows you to execute parameterized queries.

- a) ResultSet
- b) **PreparedStatement**

### c)PreparedStatement

### d)Condition

88) Three methods are central to the life cycle of a servlet \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_ .

a)init(), main(), run()

**b)init(), service(), destroy()**

c)init(), run(), stop()

d)init(), start(), stop()

89) What is data in following program.

```
import java.sql.*;
public class Selectdbase
{
public static void main(String args[])
{
try
{
Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
Connection con=DriverManager.getConnection("jdbc:odbc:data");
Statement st=con.createStatement();
ResultSet rs=st.executeQuery("select * from emp");
while(rs.next())
{
System.out.println("id:"+rs.getInt("id"));
System.out.println("salary:"+rs.getString("salary"));
System.out.println("name:"+rs.getString("name1"));
}
con.close();
}
catch(SQLException e)
{}
catch(Exception e)
{
}
}}
```

a)Driver name

b)database name

c)table name

**d)data source name**

90) What is output of following program.

```
import java.sql.*;
public class jdbc1
{
public static void main(String args[])
{
try
{
Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
Connection con=DriverManager.getConnection("jdbc:odbc:data");
Statement st=con.createStatement();
ResultSet rs=st.executeQuery("select * from student");
while(rs.next())
{
System.out.println("id:"+rs.getInt("id"));
System.out.println("name:"+rs.getString("name1"));
}
con.close();
}
catch(SQLException e)
{}
catch(Exception e)
{
}
}}
```

- a)"id:"+rs.getInt("id"
- b)name:"+rs.getString("name1
- c)both a and b
- d)values of id and name will be displayed from table.**

91) Which is the correct method \*\*\*\*\*for updating table rows from given option.

```
import java.sql.*;
public class Updatedbase
{
public static void main(String args[])
{
try
{
Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
Connection con=DriverManager.getConnection("jdbc:odbc:data");
Statement st=con.createStatement();
ResultSet rs=st.executeQuery("select * from emp");

St.*****("Update emp set name1='jack' where id=2");
System.out.println("\n\nafter change");
rs=st.executeQuery("select * from emp");
while(rs.next())
```

```

{
System.out.println("id:"+rs.getInt("id"));
System.out.println("salary:"+rs.getString("salary"));
}
con.close();
}
catch(SQLException e){ }
catch(Exception e)
{
}
}}

```

- a)executeUpdate()
- b)executeQuery()
- c)execute()
- d)ExecuteUpdate()

92) Find out error from following code.

```

import java.sql.*;
public class Updatedbase
{
public static void main(String args[])
{
try
{
Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
Connection con=DriverManager.getConnection("jdbc:odbc:data2");
Statement st=con.createStatement();
resultSet rs=st.executeQuery("select * from college");

while(rs.next())
{
System.out.println("id:"+rs.getInt("id"))
System.out.println("name1:"+rs.getString("name1"));
}
con.close();
}
catch(SQLException e)
{}
catch(Exception e)
{
}
}}

```

- a)Error in resultSet statement.
- b)Error in while loop
- c)both a and b**
- d)Error in catch()

93) Find out error in following program.

```
import java.sql.*;
public class Selectdbase
{
public static void main(string args[])
{
try
{
Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
Connection con=DriverManager.getConnection("jdbc:odbc:data");
Statement st=con.createStatement();
ResultSet rs=st.executeQuery("select * from emp");
while(rs.next())
{
System.out.println("id:"+rs.getInt("id"));
System.out.println("salary:"+rs.getString("salary"));
System.out.println("name:"+rs.getString("name1"));
}
con.close();
}
catch(SQLException e)
{}
catch(Exception e)
{
}
}}
```

- a)Error in main()
- b)Error in try block
- c)both a and b**
- d)Error in catch block

94) Find the error in following code:

```
import java.sql.*;

class MysqlCon

{

public static void main(String args[])

{

try{

Class.forName("com.mysql.jdbc.Driver");
```

```

Connection con=DriverManager.getConnection (
"jdbc:mysql://localhost:3306/sonoo","root","root");

//here sonoo is database name, root is username and password

Statement stmt=con.createStatement();

ResultSet rs=stmt.executeQuery("select * from emp");

while(rs.next())

System.out.println(rs.getInt(1)+" "+rs.getString(2)+" "+rs.getString(3));

    }

catch(Exception e)

{

    System.out.println(e);

}

}

}

```

a.missing semicolon

**b.Connection is not terminated.(con.close())**

c.missing brackets

d. both a and c

e. all of the above

95) Find the error in following code:

```

import java.sql.*;
class MysqlCon{
public static void main(String args[]){
try{
Class.forName("com.mysql.jdbc.Driver");
Connection con=DriverManager.getConnection(
"jdbc:mysql://localhost:3306/sonoo","root","root");

```

```

//here sonoo is database name, root is username and password
Statement stmt=con.createStatement();
ResultSet rs=executeQuery("select * from emp");
while(rs.next())
System.out.println(rs.getInt(1)+" "+rs.getString(2)+" "+rs.getString(3));
con.close(); }
catch(Exception e){
System.out.println(e);}
} }

```

- a)missing semicolon
- b)incorrect syntax of Statement
- c)incorrect syntax of ResultSet
- d)both a and c**
- e)all of the above

96) Find the error in following code:

```

import java.sql.*;

class MysqlCon{

public static void main(String args[]){

try{

Class.forName("com.mysql.jdbc.Driver");

Connection con=DriverManager.getConnection(
"jdbc:mysql://localhost:3306/sonoo","root","root");

//here sonoo is database name, root is username and password

Statement stmt=createStatement();

ResultSet rs=executeQuery("select * from emp");

while(rs.next())

System.out.println(rs.getInt(1)+" "+rs.getString(2)+" "+rs.getString(3));

con.close(); }

catch(Exception e){

```



```
System.out.println(e)}  
} }
```

- a. missing semicolon
- b. incorrect syntax of Statement
- c. incorrect syntax of ResultSet
- d. both a and c
- e. all of the above**

97) Find the error in following code:

```
import java.awt.*;  
class JdbcDemo {  
    public static void main(String a[]) {  
        try {  
            Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");  
            System.out.println("Driver Loaded");  
            String url="jdbc:odbc:StudInfo";  
            Connection con=DriverManager.getConnection(url);  
            System.out.println(" Connection to DataBase created");  
            Statement stmt = con.createStatement();  
            String query = "select * from StudTable";  
            ResultSet rs = stmt.executeQuery(query);  
            while(rs.next()){  
                System.out.println(" ID : "+ rs.getInt(1));  
                System.out.println(" Name : "+ rs.getString(2));
```

```

System.out.println(" Marks : "+ rs.getInt(3));
System.out.println();

}}

catch(ClassNotFoundException e)

{

e.printStackTrace();

}

catch(SQLException e)

{

e.printStackTrace();

}}

```

- a)missing semicolon
- b)missing bracket
- c)incorrect syntax of resultset
- d) **None of the above**

98) What will be the output of the code considering the database is created:

```

import java.sql.*;

class JdbcDemo {

public static void main(String a[]) {

    try {

        Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");

        System.out.println("Driver Loaded");

        String url="jdbc:odbc:StudInfo";

        Connection con=DriverManager.getConnection(url);

```

```
System.out.println(" Connection to DataBase created");

Statement stmt = con.createStatement();

String query = "select * from StudTable";

ResultSet rs = stmt.executeQuery(query);

while(rs.next()){

System.out.println(" ID : "+ rs.getInt(1));

System.out.println(" Name : "+ rs.getString(2));

System.out.println(" Marks : "+ rs.getInt(3));
System.out.println();

}}

catch(ClassNotFoundException e)

{

e.printStackTrace();

}

catch(SQLException e)

{

e.printStackTrace();

}}}
```

```
Command Prompt
C:\Users\logon.VP-L1A-3\Desktop\jdk1.7.0_03\bin>javac JdbcDemo.java
C:\Users\logon.VP-L1A-3\Desktop\jdk1.7.0_03\bin>java JdbcDemo
Driver Loaded
Connection to DataBase created
ID : 1
Name : YASH
Marks : 91
ID : 2
Name : TANMAY
Marks : 77
ID : 3
Name : SANSKAR
Marks : 88
ID : 4
Name : SANCHIT
Marks : 91
C:\Users\logon.VP-L1A-3\Desktop\jdk1.7.0_03\bin>
```

a.

b.it contains error

c.none of the above

99) Find the error in following code:

```
import java.awt.*;

class JdbcDemo {

public static void main(String a[]) {

    try {

        Class.forName("sun.jdbc.odbc");

        System.out.println("Driver Loaded");

        String url="jdbc:odbc:StudInfo";

        Connection con=DriverManager.getConnection(url);

        System.out.println(" Connection to DataBase created");

        Statement stmt = con.createStatement();

        String query = "select * from StudTable";
```

```

ResultSet rs = stmt.executeQuery(query);

while(rs.next()){

System.out.println(" ID : "+ rs.getInt(1));

System.out.println(" Name : "+ rs.getString(2));

System.out.println(" Marks : "+ rs.getInt(3));
System.out.println();

}}

catch(ClassNotFoundException e)

{

e.printStackTrace();

}

catch(SQLException e)

{

e.printStackTrace();

}

}

}

```

- a.missing semicolon
- b.missing bracket
- c.driver is not suitable**
- d. None of the above

100) boolean isLast() method defines \_\_\_\_\_

- a) Determines whether the ResultSet cursor points to the second last row

- b) Determines whether the ResultSet cursor points to the last statement
- c) Determines whether the ResultSet cursor points to the last Column
- d) **Determines whether the ResultSet cursor points to the last row**

101) Callable statement object in JDBC is used to execute a call to

- a) **stored procedure**
- b) Statement
- c) Prepared Statement
- d) Procedure

102) CallableStatement is used to execute\_\_\_\_\_

- a) **stored procedure**
- b) Statement
- c) Prepared Statement
- d) Procedure

103) Class.forName("\_\_\_\_\_")

- a) sun.jdbc.JdbcOdbcDriver
- b) jdbc.odbc.JdbcOdbcDriver
- c) **sun.jdbc.odbc.JdbcOdbcDriver**
- d) sun.jdbc.odbc.JdbcOdbc

104) class.forName() method throws

- a) NotFoundException
- b) **ClassNotFoundException**
- c) SQLException
- d) Cant Throws any exception

105) Connection object can be initialized using the \_\_\_\_\_ method of the DriverManager Class.

- a) **getConnection()**
- b) getManager()
- c) getconnection()
- d) Getmanager()

106) createStatement() method without any parameter is used to create a statement with

forward only and read only ResultSet Database meta data are retrieved through \_\_\_\_\_.

- a) **PreparedStatement object**
- b) Statement object
- c) Connection object

d) CollableStatement object

107) DELETE statement of an SQL is executed by \_\_\_\_\_.

- a) **executeUpdate()**
- b) executeQuery()
- c) Execute()
- d) executeStatement()

108) DriverManager.getConnection(\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_) What are the two parameters that are included ?

- a) User ID, URL or machine name where server runs, Password
- b) URL or machine name where server runs, Password, User ID,
- c) **URL or machine name where server runs, User ID, Password**
- d) Database name, User ID, Password

109) Every driver must provide a class that should implement the \_\_\_\_\_

- a) **Driver interface**
- b) Connection Interface
- c) Statement Interface
- d) Database Interface

110) Following is return type of executeUpdate( ):

- a) String
- b) Array
- c) byte
- d) **Int**

111) execution of delete SQL query in JDBC, ..... method must be used.

- a) execute()
- b) executeQuery()
- c) executeUpdate()**
- d) executeStatement()

112) For execution of INSERT SQL query in JDBC, ..... method must be used.

- a) executeUpdate()**
- b) executeStatement()
- c) executeQuery()
- d) Execute()

113) For execution of SELECT SQL query in JDBC, \_\_\_\_\_ method must be used.

- a) executeQuery()**
- b) Execute()
- c) executeUpdate()
- d) executeAll()

114) forName is a \_\_\_\_\_ type method

- a) Static**
- b) Dynamic

115) getConnection() method of which class

- a) DriverManager**
- b) Statement



- c) Connection
- d) None of above

116) How many JDBC driver types are available by sun Microsystem?

- a) 6
- b) 4**
- c) 5
- d) 3

117) If a PreparedStatement is a SQL SELECT statement, you execute the statement using

\_\_\_\_\_.

- a) PreparedStatement.execute();
- b) Statement.executeQuery();
- c) PreparedStatement.executeQuery();**
- d) PreparedStatement.executeUpdate();

118) If you need to use a stored procedure with output parameters, which of the following statement type should be used to call the procedure?

- a) CallableStatement**
- b) PreparedStatement
- c) Statement
- d) ProcedureStatement

119) In 2-tier architecture , the first tier is generally\_\_\_\_\_

- a) GUI**
- b) Server
- c) Client

d) database

120) In the following JDBC drivers which is known as partly java driver?

a) Pure-Java Driver

b) JDBC-net Pure Java

c) JDBC driver

**d) Native-API driver**

121) In the three tier model the middle tier of the services acts as a mediator between

\_\_\_\_\_ and \_\_\_\_\_.

a) **Java application and databases**

b) Client and Server

c) Java application and client

d) Java application and server

122) JDBC is a ----- interface, which means that it is used to invoke SQL commands directly.

a) high level

b) **low level**

c) middle level

d) top level

123) JDBC Stands for

a) Java Database Connection

b) **Java Database Connectivity**

124) JDBC-ODBC bridge product provide \_\_\_\_\_ access via \_\_\_\_\_.

- a) JDBC driver, JDBC drivers
- b) ODBC drivers, JDBC driver
- c) **JDBC driver, ODBC drivers**
- d) None

125) Methods of ResultSet() throws \_\_\_\_\_

- a) IOException
- b) Exception
- c) DatabaseException
- d) **SQLException**

126) Name the type number of driver belongs to JDBC ODBC Bridge driver?

- a) **Type 1**
- b) Type 2
- c) Type 3
- d) Type 4

127) Native API converts \_\_\_\_\_ into the \_\_\_\_\_ used by DBMS.

- a) Native API calls, JDBC API
- b) **JDBC API, Native API calls**
- c) JDBC API, pure API calls
- d) JDBC API, pure Java

128) Native – protocol pure Java converts ..... in to the ..... used by DBMSs directly.

- a) **JDBC calls, network protocol**
- b) Native API calls, JDBC API

- c) JDBC API, pure API call
- d) JDBC API, Native API calls

129) ODBC Drivers are platform \_\_\_\_\_

- a) **Dependent**
- b) Independent
- c) Both a and b
- d) None

130) ODBC requires configuring \_\_\_\_\_ which represents the target database.

- a) Data String Name
- b) **Data Source Name**
- c) Domain Name
- d) Database name

131) The PreparedStatement \_\_\_\_\_ symbol is placeholder that is replaced by the input parameter at seen time.

- a) ?
- b) \*
- c) &
- d) #

132) The ResultSet \_\_\_\_\_ provides methods for retrieving and manipulating the results of executed queries.

- a) Statement
- b) Package
- c) Class

**d) Interface**

133) The Type 3 architecture is \_\_\_\_\_

- a) **JDBC-Net pure Java**
- b) JDBC-ODBC Bridge Driver
- c) Native API partly Java driver
- d) Native Protocol Pure-Java Driver

134) The \_\_\_\_\_ is the language for interacting with Database.

- a) **Structured Query Language**
- b) Data Manipulation Language
- c) Data Definition Language
- d) Stored Query Language

135) Type 1 driver is also known as

- a) Native API partly Java driver
- b) Native Protocol Pure-Java Driver
- c) **JDBC-ODBC Bridge Driver**
- d) JDBC-Net pure Java

136) Type 3 driver is also known as \_\_\_\_\_

- a) **JDBC-net Pure Java**
- b) JDBC-Net pure Java
- c) Native API partly Java driver
- d) Native Protocol Pure-Java Driver

137) Type II JDBC driver is also known as \_\_\_\_\_

- a) JDBC-net Pure Java
- b) JDBC-Net pure Java
- c) Native API partly Java driver**
- d) Native Protocol Pure-Java Driver

138) Type IV JDBC driver is also known as \_\_\_\_\_

- a) DBC-net Pure Java
- b) JDBC-Net pure Java
- c) Native API partly Java driver
- d) Native Protocol Pure-Java Driver**

139) Type4 driver is also known as:

- a) 100% Pure Java**
- b) DBC-net Pure Java
- c) JDBC-Net pure Java
- d) Native API partly Java driver

140) Where the object of ResultSet maintains a cursor?

- a) Second Row
- b) First Row**
- c) Last Row
- d) Middle Row

141) Which class is used to connect java application to JDBC driver

- a) DriverManager**
- b) Connection

- c) Statement
- d) ResultSet

142) Which driver is called as a thin driver in JDBC?

- a) Type-2 Driver
- b) Type-3 Driver
- c) Type-1 Driver
- d) Type-4 Driver**

143) Which interface provides methods to execute queries with the database?

- a) Statement interface**
- b) Connection
- c) Resultset
- d) DriverManager

144) Which Interface is used to execute dynamic SQL statements?

- a) PreparedStatement**
- b) Statement
- c) CallableStatement
- d) Procedurestatement

145) Which is default ResultSet type

- a) TYPE\_SCROLL\_SENSITIVE
- b) TYPE\_SCROLL\_INSENSITIVE
- c) TYPE\_FORWARD\_ONLY**
- d) TYPE\_SCROLL\_FIRST

146) Which JDBC driver Type (s) can be used in either applet or servelt code?

- a) Type 2
- b) Type 3
- c) Type 4
- d) Both Type 3 and Type 4**

147) Which JDBC driver Type(s) can you use in a three-tier architecture and if the Web server and the DBMS are running on the same machine?

- a) Type 3
- b) Type 2
- c) Type 4
- d) Both Type 3 and 4**

148) Which JDBC driver Types are used for over communications networks?

- a) Type 2
- b) Type 3
- c) Type 4
- d) Both Type 3 and Type 4**

149) Which method is used to obtain count of total rows of ResultSet

- a) getRow()**
- b) getrow()
- c) GetRow()
- d) Row()

150) Which method is used to perform DML statements in JDBC?

- a) executeQuery()



- b) execute()
- c) executeUpdate()**
- d) executeAll()

151) Which method of class is used to register & dynamically load the driver class?

- a) forName()**
- b) DriverManager
- c) Statement
- d) Resultset

152) which of the following function is used to find the column count of the particular ResultSet ?

- a) getColumnCount()**
- b) getRow
- c) getColumnCount()
- d) getcolumncount()

153) Which of the following invokes functions in sql ?

- a) Callable statements**
- b) Prepared Statement
- c) Procedure Statement
- d) Statement

154) Which type of driver converts JDBC calls into the network protocol used by the database management system directly

- a) Type 4**
- b) Type 3
- c) Type 2

d) Type 1

155) Which type of driver is unique in JDBC?

- a) Native Protocol Pure-Java Driver
- b) **JDBC-Native API**
- c) Native API partly Java driver
- d) JDBC-ODBC Bridge Driver

156) \_\_\_\_\_ calls get converted into native C or C++ API calls.

- a) Native Protocol Pure-Java Driver
- b) **JDBC-Native API**
- c) Native API partly Java driver
- d) JDBC-ODBC Bridge Driver

157) \_\_\_\_\_ interface allows storing results of query?

- a) **ResultSet**
- b) Connection
- c) Statement
- d) DriverManager

158) All raw data types including binary documents or images should be read and uploaded to the database as an array of ....

- a) **Byte**
- b) Int

c) String

d) Array

159) Analyse the following code and fill the appropriate statement in the blanks

```
import java.sql.*;

class DB

{

public static void main(String args[])throws Exception

{

Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");

Connection con=DriverManager.getConnection("jdbc:odbc:mysdn");

Statement stmt=con.createStatement();

ResultSet rs=stmt._____("select * from empwhere id=101");

System.out.println("EmpName\tDesignation\tSalary");

while(rs.next())

{

System.out.println(rs.getString(2)+"\t"+rs.getString(3)+"\t"+rs.getInt(4));

}

con.close();

}

}
```

Ans: executeQuery()

160) Choose missing statements in following code from given options.

```

import java.sql.*;

Class DemoFetch

{

public static void main(String args[])

{

Connection con;

Statement stmt;

ResultSet rs; String qry, url;

try {

Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");

url="Jdbc:Odbc:studdsn";

con=DriverManager.getConnection(url,"","");

stmt=con.createStatement();

qry="select * from stud"; rs=_____;

System.out.println("Roll No\tName\tPercentage");

while(rs.next())

{

int rno=rs.getInt("roll");

String nm=rs.getString("sname");

double per=rs.getDouble("per");

System.out.println(rno+"\t"+nm+"\t"+per);

}

con.close();

}

catch(Exception e){}

}

}

```

Answer: stmt.executeQuery(qry)

161) Choose missing statements in following code from given options.

```
import java.sql.*;

Class DemoFetch1

{

public static void main(String args[])

{

Connection con;

PreparedStatement pstmt;

ResultSet rs;

String qry,url;

try

{

Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");

url="Jdbc:Odbc:studdsn";

con=DriverManager.getConnection(url,"","");

qry="select * from stud";

pstmt=con.prepareStatement(qry);

rs=_____

System.out.println("Roll No\tName\tPercentage");

while(rs.next())

{

int rno=rs.getInt("roll");

String nm=rs.getString("sname");
```

```

double per=rs.getDouble("per");
System.out.println(rno+"\t"+nm+"\t"+per);
}
con.close();
}
catch(Exception e)
{
System.out.println(e.toString());
}
}
}

```

Answer: pstmt.executeQuery(qry)

162)

```

Connection con = DriverManager.getConnection ("jdbc:odbc:wombat", "login", "password");
Statement stmt = con.createStatement();
ResultSet rs = stmt.executeQuery("SELECT a, b, c FROM Table1");
while (rs.next())
{
Integer x = rs.getInt("c");
String s = rs.getString("a");
Float f = rs.getFloat("b");
}

```

What is WRONG with the code above?

Answer: Retrieval of the fields is in the wrong order.

163) Connection object can be initialized using the ..... method of the Driver Manager class.

- a) **getConnection()**
- b) Getconnection()
- c) getStatement()
- d) Getstatement()

164) Consider following code and state missing code ?

```
import java.sql.*;
class exp2
{
public static void main(String args[])throws Exception
{
try
{
Class.forName("_____");
Connection con=DriverManager.getConnection("Jdbc:Odbc:demo1dsn");
Statement st=con.createStatement();
ResultSet rs=st.executeQuery("select * from Table1");
System.out.println("After insertion of new record");
while(rs.next())
{
System.out.println(rs.getString(1));
System.out.println(rs.getString(2));
System.out.println(rs.getString(3));
}
}
```

```

st.executeUpdate("insert into Table1 values('jasmine',10,'banglore')");
ResultSet rs1=st.executeQuery("select * from Table1 ");
while(rs1.next())
{
System.out.println(rs1.getString(1));
System.out.println(rs1.getString(2));
System.out.println(rs1.getString(3));
}
}
catch(Exception e) {}
}
}

```

Answer: sun.jdbc.odbc.JdbcOdbcDriver

165) Consider the following program. What should be the correction done in the program to get correct output?

```

import java.sql.*;
public class dbAccess
{
public static void main(String[] args)throws Exception
{
Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
Connection conn =DriverManager.getConnection("jdbc:odbc:ab", "", "");
Statement s = conn.createStatement();

```



```
String s1="update Table1 set name1='akash' where rollno='1'";  
s.executeQuery(s1); s.close();  
conn.close();  
}  
}
```

Answer: s.executeUpdate(s1)

166) Consider the following program. What should be the method used in following program to get correct output?

```
import java.sql.*;  
class Ddemo1  
{  
public static void main(String args[]) throws Exception  
{  
Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");  
Connection c=DriverManager.get*****("jdbc:odbc:ODSN", " ", " ");  
Statement s=c.createStatement();  
ResultSet rs=s.executeQuery("select *from StudTable");  
System.out.println("Name" + "\t " + "Roll_No" + "\t " + "Avg");  
while(rs.next())  
{  
System.out.println(rs.getString(1)+" \t "+rs.getInt(2)+" \t \t"+rs.getDouble(3));  
s.close();  
c.close();  
}  
}
```

```
}  
}
```

Answer: Connection()

167) Consider the following program. Select the statement that should be added to get correct output.

```
import java.sql.*;  
  
class DBEx  
{  
    public static void main(String args[])  
    {  
        Try  
        {  
            Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");  
            Connection c = DriverManager.getConnection("jdbc:odbc:mydsn","","");  
            ResultSet rs = s.executeQuery("select * from StudTable");  
            while(rs.next())  
            {  
                System.out.println("Roll No.: "+rs.getInt(1));  
                System.out.println("Name : "+rs.getString(2));  
                System.out.println("Branch : "+rs.getString("Branch")+"\n");  
            }  
            s.close();  
            c.close();  
        }  
    }  
}
```

```

}
catch(Exception e)
{
System.out.println("Caught: "+e);
}
}
}
}

```

Answer: Statement s = c.createStatement();

168) Consider the following program. Which two exceptions are thrown?

```

Package javaapplication21;
import java.sql.*;
public class db15 { public static void main(String args[])
throws _____, _____
{
Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
Connection c=DriverManager.getConnection("jdbc:odbc:MyDSN","","");
System.out.println("Connection Established");
}
}

```

Answer: ClassNotFoundException, SQLException

169) Invoking Class.forName(mydriver) throws \_\_\_\_\_.

- a) ClassNotFoundException
- b) IOException
- c) SQLException
- d) Both a and c**

170) Permission class is part of \_\_\_\_\_ package

- a) java.security.permission**
- b) java.security
- c) java.permission
- d) None of above

171) PreparedStatement updateemp = con.prepareStatement("insert into emp values(?,?,?);  
How many values are need to insert for prepareStatement paprameter?

- a) 3**
- b) 4
- c) 2
- d) 1

172) Set XXX() method binds values to the parameters. Where XXX represents

- a) Data Type**
- b) Method
- c) Interface
- d) Class

173) The JDBC-ODBC bridge is:

- a) Three tiered
- b) Multithreaded**

- c) Best for any platform
- d) All of the above