**JDBC**

1.what is the disadvantage of type-4 native protocol driver?

Ans. At client side, a separate driver is needed for each database.

2. BLoB, CLoB, ARRAY and REF columns can be updated in

Ans. JDBC 3.0

3.which of the following methods finds the maximum number of connections that a specific driver can obtain?

Ans. DatabaseMetaData.getMaxConnections

4. which of the following allows non repeatable read in JDBC Connection?

Ans. TRANSACTION\_REPEATABLE\_READ

5.the class java.sql.Timestamp has its supper class as

Ans. java.util.Date

6.which is the false as far as type 4 driver is concern?

Ans. Type 4 drivers cannot be used with Netscape

7. which of the following methods are needed for loading a database driver in JDBC?

Ans. registerDriver() method And Class.forName()

8. which driver is efficient and always preferable for using JDBC applicatins?

Ans. Type-4

9.which is the false as far as type 4 driver is concern in JDBC?

Ans. Interim Statement

10. The JDBC-ODBC bridge supports multiple concurrent open statements per connection?

Ans. True

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

Ans. Byte

12. The Jdbc-odbc is------

Ans. Multithreaded

13. which driver is called as thin driver in JDBC?

Ans. Type-4 driver

14. To execute a stored procedure "totalstock" in a database server, which of the following code snipet is used?

Ans. CallableStatement callabstmnt = cn.prepareCall("{call totalStock}");cs.executeQuery();

15. When the message "N suitable driver " occurs?

Ans. When the JDBC database URL passed is not constructed properly

16. Are prepared statements actually compiled?

Ans. Yes, they compiled

17.How many transaction isolation levels are defined in java.sql.Connection interface?

Ans. 5

18. JDBC facilities to store the java objectives by using which of the methods of prepared statement

1. setObject()

2. setBlb()

3.setClb

Ans. all of the above

19. which statement is static and syncronized in JDBC API?

Ans. getConnection()

20. which of the following methods are needed for loading a database driver in JDBC?

Ans. registerDriver() method and Class.forName()

21. Which statements about JDBC are true? (2 answers)

(a) JDBC is an API to connect to relational-, object- and XML data sources

(b) JDBC stands for Java DataBase Connectivity

(c) JDBC is an API to access relational databases, spreadsheets and flat files

(d) JDBC is an API to bridge the object-relational mismatch between programs and relational databases

Ans . b, c

22. Which packages contain the JDBC classes?

(a) java.jdbc and javax.jdbc

(b) java.jdbc and java.jdbc.sql

(c) java.sql and javax.sql

(d) java.rdb and javax.rdb

Ans. C

23. Which type of driver converts JDBC calls into the network protocol used by the database management system directly?

(a) Type 1 driver

(b) Type 2 driver

(c) Type 3 driver

(d) Type 4 driver

Ans. d

24. Which type of Statement can execute parameterized queries?

(a) PreparedStatement

(b) ParameterizedStatement

(c) ParameterizedStatement and CallableStatement

(d) All kinds of Statements (i.e. which implement a sub interface of Statement)

Ans. a

25. How can you retrieve information from a ResultSet?

(a) By invoking the method get(..., String type) on the ResultSet, where type is the database type

(b) By invoking the method get(..., Type type) on the ResultSet, where Type is an object which represents a database type

(c) By invoking the method getValue(...), and cast the result to the desired Java type.

(d) By invoking the special getter methods on the ResultSet: getString(...), getBoolean (...), getClob(...),...

Ans. d

26. How can you execute DML statements (i.e. insert, delete, update) in the database?

(a) By making use of the InsertStatement, DeleteStatement or UpdateStatement classes.

(b) By invoking the execute(...) or executeUpdate(...) method of a normal Statement object or a sub-interface object thereof.

(c) By invoking the executeInsert(...), executeDelete(...) or executeUpdate(...) methds of the DataMdificatinStatement object.

(d) By making use of the execute(...) statement of the DataMdificatinStatement object.

Ans. b

27. How do you know in your Java program that a SQL warning is generated as a result of executing a SQL statement in the database?

(a) You must catch the checked SQLException which is thrown by the method which executes the statement

(b) You must catch the unchecked SQLWarningException which is thrown by the method which executes the statement

(c) You must invoke the getWarnings() method on the Statement object (or a sub interface thereof)

(d) You must query the ResultSet object about possible warnings generated by the database

Ans. c

28. What is, in terms of JDBC, a Data Source?

(a) A DataSource is the basic service for managing a set of JDBC drivers

(b) A DataSource is the Java representating of a physical data source

(c) A DataSource is a registry pint for JNDI-services

(d) A DataSource is a factory of connections to a physical data source

Ans. d

29. What is the meaning of ResultSet.TYPE\_SCRoLL\_INSENSITIVE

(a) This means that the ResultSet is insensitive to scrolling

(b) This means that the Resultset is sensitive to scrolling, but insensitive to updates, i.e. not updateable

(c) This means that the ResultSet is sensitive to scrolling, but insensitive to changes made by others

(d) The meaning depends on the type of data suorce, and the type and version of the driver you use with this data source

Ans.c

30. Are ResultSets updateable?

(a) Yes, but only if you call the method openCursor() on the ResultSet, and if the driver and database support this option

(b) Yes, but only if you indicate a concurrency strategy when executing the statement, and if the driver and database support this option

(c) Yes, but only if the ResultSet is an object of class Updateable ResultSet, and if the driver and database support this option

(d) No, ResultSets are never updateable. You must explicitly execute DML statements (i.e. insert, delete and update) t change the data in the underlying database.

Ans. b

31. What statements are correct abut JDBC transactions (2 correct answers)?

(a) A transaction is a set f successfully executed statements in the database

(b) A transaction is finished when commit() or rollback() is called on the Connection object,

(c) A transaction is finished when commit() or rollback() is called on the Transaction object

(d) A transaction is finished when close() is called on the Connection object.

Ans.b,d

32. How can you start a database transaction in the database?

(a) By asking a Transaction object to your Connection, and calling the method begin() on it

(b) By asking a Transaction object to your Connection, and setting the autoCommit property of the Transaction to false

(c) By calling the method beginTransaction() on the Connection object

(d) By setting the autoCommit property of the Connection to false, and execute a statement in the database

Ans. d

33. What is the meaning of the transaction isolation level TRANSACTIN\_REPEATABLE\_READ

(a) Dirty reads, non-repeatable reads and phantom reads can occur

(b) Dirty reads are prevented; non-repeatable reads and phantom reads can occur

(c) Dirty reads and non-repeatable reads are prevented; phantom reads can occur

(d) Dirty reads, non-repeatable reads and phantom reads are prevented

Ans. C

34. How do you use a savepoint?

(a) A savepoint is realised by calling setAutoCommit(true) on the connection

(b) A savepint is activated by the method setSavePoint(“mysavepoint”) on the transaction

(c) A savepoint is used to mark intermediate points inside a transaction, in order to get a more fine-grained control. Transactions can be rolled back to a previous savepoint without affecting preceding work.

(d) A savepoint triggers an automatic synchronisation with the database.

Ans. c

35. What statements are correct about positioned updates (i.e. cursor updates) in ResultSets? (2 correct answers)

(a) Using the cursor technique is currently the only possible way to change the data in the current row of a ResultSet

(b) Insert statements are only supported when using scrollable cursors.

(c) only scrollable updateable ResultSets can use this approach to change the data in the current row of a ResultSet

(d) The name of the cursor is specified by the setCursorName(String name) method the Statement object.

Ans. b, d

36. How can you execute a stored procedure in the database?

(a) Call method execute() on a CallableStatement object

(b) Call method executePrcedure() on a Statement object

(c) Call method execute() on a StredPrcedure object

(d) Call method run() on a PrcedureCmmand object

Ans. a

37. What happens if you call the method close() in a ResultSet object?

(a) the method close() does not exist for a ResultSet. only Connections can be closed.

(b) the database and JDBC resources are released

(c) you will get a SQLException, because only Statement objects can close ResultSets

(d) the ResultSet, together with the Statement which created it and the Connection from which the Statement was retrieved, will be closed and release all database and JDBC resources

Ans. b

38. What happens if you call deleteRow() on a ResultSet object?

(a) The row you are positined on is deleted from the ResultSet, but not from the database.

(b) The row you are positioned no is deleted from the ResultSet and from the database

(c) The result depends on whether the property synchrnize With Data Suorce is set to true or false

(d) You will get a compile error: the method does not exist because you can not delete rows from a ResultSet

Ans. B

39. What statements are correct about batched insert and updates? (2 answers)

(a) To create a batch of insert and update statements, you create an object of type Batch, and call the method addStatement(String statement) for each statement you want to execute in the batch

(b) Batch insert and updates are only possible when making use of parameterized queries.

(c) To do a batched update/insert, you call addBatch(String statement) on a Statement object for each statement you want to execute in the batch

(d) To execute a batched update/insert, you call the executeBatch() method on a Statement Object

Ans. c, d

40. What is correct about DDL statements (create, grant,...)?

(a) DDL statements are treated as normal SQL statements, and are executed by calling the execute() method on a Statement (or a sub interface thereof) object

(b) To execute DDL statements, you have to install additional support files

(c) DDL statements cannot be executed by making use f JDBC, you should use the nativedatabase tools for this.

(d) Support for DDL statements will be a feature of a future release of JDBC

Ans. a

41 . Suppose that your program accesses MySQL or Oracle database. Which of the following statements are true?

A. If the driver for MySQL and Oracle are not in the classpath, the program will have a runtime error, indicating that the driver class cannot be loaded.

B. If the database is not available, the program will have a runtime error, when attempting to create a Connection object.

C. If the database is not available, the program will have a syntax error.

D. If the driver for MySQL and Oracle are not in the classpath, the program will have a syntax error.

Ans. a b

42  Analyze the following code:

     ResultSet resultSet = statement.executeQuery

       ("select firstName, mi, lastName from Student where lastName "

         + " = 'Smith'");

     System.out.println(resultSet.getString(1));

A. If the SQL SELECT statement returns no result, resultSet is null.

B. resultSet.getString(1) returns the firstName field in the result set.

C. resultSet.getString(1) returns the mi field in the result set.

D. The program will have a runtime error, because the cursor in resultSet does not point to a row. You must use resultSet.next() to move the cursor to the first row in the result set. Subsequently, resultSet.next() moves the cursor to the next row in the result set.

Ans. b d

43 . Which of the following statements are true?

A. PreparedStatement is a subinterface of Statement

B. The parameters in a prepared statement is denoted using the ? sign.

C. PreparedStatement is for SQL query statements only. You cannot create a PreparedStatement for SQL update statements.

D. PreparedStatement is efficient for repeated executions.

Ans. a b d

44.  In a relational data model, \_\_\_\_\_\_\_\_ provides the means for accessing and manipulating data.

A. SQL

B. Language

C. Structure

D. Integrity

Ans. a b

45.  What information may be obtained from a ResultSetMetaData object?

A. number of columns in the result set

B. number of rows in the result set

C. database URL and product name

D. JDBC driver name and version

Ans. A

46.  Which of the following statements are true?

A. You may load multiple JDBC drivers in a program.

B. You may create multiple connections to a database.

C. You can send queries and update statements through a Statement object.

D. You may create multiple statements from one connection.

Ans. a b c d

47.  Which of the following are interfaces?

A. DriverManager

B. Connection

C. Statement

D. ResultSet

Ans. b c d

48  To connect to a local MySQL database named test, use

A. Connection connection = DriverManager.getConnection("jdbc:mysql://localhost/test");

B. Connection connection = DriverManager.getConnection("mysql:jdbc://localhost/test");

C. Connection connection = DriverManager.connect("jdbc:mysql://localhost/test");

D. Connection connection = DriverManager.getConnection(jdbc:mysql://localhost/test);

Ans. a

49.  To execute a SELECT statement "select \* from Address" on a Statement object stmt, use

A. stmt.execute("select \* from Address");

B. stmt.query("select \* from Address");

C. stmt.executeQuery("select \* from Address");

D. stmt.executeUpdate("select \* from Address");

Ans. c

50.  Database meta data are retrieved through \_\_\_\_\_\_\_\_\_\_\_\_.

A. a ResultSet Object

B. a PreparedStatement object

C. a Connection object

D. a Statement object

Ans. C

51.  SQL \_\_\_\_\_\_\_\_ statements may change the contents of a database.

A. DELETE

B. UPDATE

C. SELECT

D. INSERT

Ans. a b d

52.  Where is com.mysql.jdbc.Driver located?

A. in the standard Java library bundled with JDK

B. in a JAR file classes12.jar

C. in a JAR file mysqljdbc.jar

Ans. C

53.  Result set meta data are retrieved through \_\_\_\_\_\_\_\_\_\_\_\_.

A. a PreparedStatement object

B. a ResultSet Object

C. a Connection object

D. a Statement object

Ans. b

54.  Which of the following statements loads the JDBC-ODBC driver?

A. Class.loadClass("sun.jdbc.odbc.JdbcOdbcDriver")

B. Class.loadClass(sun.jdbc.odbc.JdbcOdbcDriver)

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

D. Class.forName(sun.jdbc.odbc.JdbcOdbcDriver)

Ans. C

55.  \_\_\_\_\_\_\_\_ are known as intra-relational constraints, meaning that a constraint involves only one relation.

A. Domain constraints

B. Primary key constraints

C. Foreign key constraints

Ans. a b

56.  \_\_\_\_\_\_\_\_ is an attribute or a set of attributes that uniquely identifies the relation.

A. A key

B. A superkey

C. A primary key

D. A candidate key

Ans. b

57.  What is the return value from

   stmt.executeUpdate("insert into T values (100, 'Smith')")

A. an int value indicating how many rows are effected from the invocation

B. void

C. an object that contains the status of the execution

D. a value indicating whether the SQL statement has been executed successfully

Ans. a

58.  A database URL for a MySQL database named test on host panda.armstrong.edu is \_\_\_\_\_\_\_\_.

A. jdbc:mysql:/panda.armstrong.edu/test

B. jdbc:mysql://panda.armstrong.edu/test

C. jdbc.mysql.//panda.armstrong.edu/test

D. jdbc.mysql://panda.armstrong.edu/test

Ans. b

59.  To create a statement on a Connection object conn, use

A. Statement statement = Connection.createStatement();

B. Statement statement = conn.createStatement();

C. Statement statement = connection.create();

D. Statement statement = conn.statement();

Ans. B

60.  In a relational data model, \_\_\_\_\_\_\_\_\_ imposes constraints on the data.

A. Language

B. Structure

C. SQL

D. Integrity

Ans. D

61.  A database URL for an access database source test is \_\_\_\_\_\_\_\_.

A. sun.jdbc:odbc:test

B. test

C. jdbcodbc:test

D. jdbc:odbc:test

Ans. D

62.  Invoking Class.forName method may throw \_\_\_\_\_\_\_\_\_\_\_.

A. ClassNotFoundException

B. RuntimeException

C. SQLException

D. IOException

Ans. A

63.  You may create a RowSet using \_\_\_\_\_\_\_\_\_\_.

A. new JdbcRowSetImpl()

B. new JdbcRowSet()

C. new CachedRowSetImpl()

D. new CachedRowSet()

E. new RowSet()

Ans. a c

64.  You can use a RowSet to \_\_\_\_\_\_\_\_\_\_.

A. set a database password

B. set a SQL query statement

C. set a database URL

D. set a database username

Ans. a b c d

65.  To add the SQL statement "insert into T values (100, 'Smith')" into the batch into a Statement stmt, use

A. stmt.addBatch("insert into T values (100, 'Smith')");

B. stmt.add("insert into T values (100, 'Smith')");

C. stmt.add('insert into T values (100, 'Smith')');

D. stmt.addBatch('insert into T values (100, 'Smith')');

Ans. A

66.  To obtain a scrollable or updateable result set, you must first create a statement using the following syntax:

A. Statement statement = connection.createStatement(ResultSet.TYPE\_FORWARD\_ONLY, ResultSet.CONCUR\_READ\_ONLY);

B. Statement statement = connection.createStatement(ResultSet.TYPE\_SCROLL\_SENSITIVE, ResultSet.CONCUR\_UPDATABLE);

C. Statement statement = connection.createStatement(ResultSet.TYPE\_SCROLL\_SENSITIVE, ResultSet.CONCUR\_READ\_ONLY);

D. Statement statement = connection.createStatement(ResultSet.TYPE\_SCROLL\_INSENSITIVE, ResultSet.CONCUR\_UPDATABLE);

Ans. b

67.  In a scrollable and updateable result set, you can use \_\_\_\_\_\_\_\_\_\_\_ methods on a result set.

A. updateRow()

B. first()

C. deleteRow()

D. insertRow()

E. last()

Ans. a b c d e

68.  RowSet is an extension of \_\_\_\_\_\_\_.

A. Statement

B. CLOB

C. ResultSet

D. Connection

Ans. C

69.  Invoking executeBatch() returns \_\_\_\_\_\_\_\_.

A. an int value indicating how many SQL statements in the batch have been executed succefully.

B. an int value indicating how many rows are effected by the batch execution.

C. a ResultSet

D. an array of counts, each of which counts the number of the rows affected by the SQL command.

Ans. D

70.  You can store images in a database using data type \_\_\_\_\_\_\_.

A. BLOB

B. varchar2

C. CLOB

D. varchar

Ans. A

Keys:

41. AB 42. BD 43. ABD 44. AB 45. A 46. ABCD 47. BCD 48. A 49. C

50. C 51. ABD 52. C 53. B 54. C 55. AB 56. B 17. A 18. B 19. B 20. D 21. D 22. A 23. AC 24. ABCD 25. A 26. B 27. ABCDE 28. C 69. D 70. A

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

JDBC MCQ Interview Questions with Answers

ODBC Administrator (Photo credit: Wikipedia)

A) ODBC written in C language

B) ODBC written in C# language

C) ODBC written in C++ language

D) ODBC written in Basic language

Ans. A) ODBC written in C language

72.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

Ans. B) ODBC drivers

73. 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

Ans. D) java.sql

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

A) executeUpdate()

B) executeQuery()

C) execute()

D) noexecute()

Ans. B) executeQuery()

75. The ......................... method executes an SQL statement that may return multiple results.

A) executeUpdate()

B) executeQuery()

C) execute()

D) noexecute()

Ans. C) execute()

76. The ........................ object allows you to execute parametrized queries.

A) ResultSet

B) Parametrized

C) PreparedStatement

D) Condition

Ans. C) PreparedStatement

77. The .................. object provides you with methods to access data from the table.

A) ResultSet

B) Parametrized

C) TableStatement

D) Condition

Ans. A) ResultSet

78. The parameters of the PreparedStatement object are ...................... when the user clicks on the Query button.

A) initialized

B) started

C) paused

D) stopped

Ans. A) initialized

79. The ...................... method sets the query parameters of the PreparedStatement Object.

A) putString()

B) insertString()

C) setString()

D) setToString()

Ans. C) setString()

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

A) putConnection()

B) setConnection()

C) Connection()

D) getConnetion()

Ans. D) getConnetion()

81. Native – protocol pure Java converts ……….. into the ………… used by DBMSs directly.

A) JDBC calls, network protocol

B) ODBC class, network protocol

C) ODBC class, user call

D) JDBC calls, user call

Ans. A

82. What is JDBC?

A) java compiler

B) Java API

C) Java interpreter

D) Both A and B

Ans. B

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

A) low-level

B) middle-level

C) higher-level

D) user

Ans. A

84.ODBC is not appropriate for direct use from java because it uses a ..............

A) C interface

B) C# interface

C) java interface

D) Both A and C

Ans. A

85. Java Soft provides ................. JDBC product components as part of the java Developer's Kit (JDK)

A) three

B) two

C) four

D) single

Ans. A

86. Kind of driver converts JDBC calls on the client API for Oracle, Sybase, Informix, DB2, or other DBMS is known as

A) JDBC-Net pure Java driver

B) JDBC-ODBC Bridge plus ODBC driver

C) Native-API partly-Java driver

D) Both A and B

Ans. c

87.Given:

84. try {

85. ResourceConnection con = resourceFactory.getConnection();

86. Results r = con.query("GET INFO FROM CUSTOMER");

87. info = r.getData();

88. con.close();

89. } catch (ResourceException re) {

90. errorLog.write(re.getMessage());

91. }

92. return info;

Which statement is true if a ResourceException is thrown on line 86?

A. Line 92 will not execute.

B. The connection will not be retrieved in line 85.

C. The resource connection will not be closed on line 88.

D. The enclosing method will throw an exception to its caller.

Ans. C

88. Which of the following is true regarding the use of the JDBC-ODBC bridge with the applets.

a. Use of the JDBC-ODBC bridge from an untrusted applet running in a browser, such as Netscape Navigator, isn't allowed.

b. It is possible to use the JDBC-ODBC bridge with applets that will be run in appletviewer since appletviewer assumes that applets are trusted.

c. It is not possible to use the JDBC-ODBC bridge with applets that are run in the HotJavaTM browser (available from Java Software), since HotJava provides an option to turn off applet security.

d. Pure Java JDBC drivers work well with applets. They are fully downloadable and do not require any client-side configuration

Ans. a b d

89. State true or false :- The new features in the JDBC 2.0 API is the ability to move a result set’s cursor backward as well as forward.

a. True

b. False

Ans. a

90.Two parts of JDBC 2.0 API are

The JDBC 2.0 core API (the java.sql package), which is included in the JavaTM 2 SDK, Standard Edition

The JDBC 2.0 Optional Package API (the javax.sql package), which is available separately or as part of the Java 2 SDK, Enterprise Edition

State true or false for the above both points

a. True

b. False

Ans. a

91. There is a bug in the jdk 1.1.x which can cause the failing of \_\_\_\_\_\_\_\_\_\_ method.

92. State true or false Can we retrieve a whole row of data at once, instead of calling an individual ResultSet.getXXX method for each column ?

a. True

b. False

Ans. a

93. Which of the following is true regarding not finding the java.sql.DriverManager class.

a. This problem can be caused by running a JDBC applet in a browser that supports the JDK 1.0.2, such as Netscape Navigator 3.0. The JDK 1.0.2 does not contain the JDBC API, so the DriverManager class typically isn't found by the Java virtual machine running

b. Most of the browsers cannot download java.\* because of security reasons. Hence many vendors of all-Java JDBC drivers supply versions of the java.sql.\* classes that have been renamed to jdbc.sql.\*, along with a version of their driver that uses these modif

c. Add import jdbc.sql.\* in your applet code instead of java.sql.\*, and add the jdbc.sql.\* classes provided by your JDBC driver vendor to your applet's codebase, then all of the JDBC classes needed by the applet can be downloaded by the browser at run time,

d. All of the above

Ans. d

94. What is the precision of java.math.BigDecimal limited \_\_\_\_\_ digits in the JDK 1.0.2 add-on version of the JDBC API.

a. 18

b. 24

c. 32

d. 64

Ans. a

95. Which of the following statements is true regarding the failing of the class.forName in jdk 1.1.x.

a. A workaround is to explicitly call the method DriverManager.registerDriver(new YourDriverClass).

b. The problem is due to race condition in the class loader.

c. The race condition prevents the static section of code in the driver class from executing and registering the driver with the DriverManager.

d. All the above.

Ans. d

96.Which of the following is false for the Type 1 JDBC bridge driver?

a. A Type 1 driver is a JDBC-ODBC bridge driver

b. This type of driver enables a client to connect to an ODBC database via Java calls and JDBC

c. Both the database and middle tier need to be Java compliant.

d. ODBC binary code must be installed on each client machine that uses this driver.

Ans. c

97. Which of the following is false regarding the Type 3 JDBC driver

a. A Type 3 driver is a JDBC-Net pure Java driver

This translates JDBC calls into a database -dependent net protocol.

b. Vendors of database middleware products can implement this type of driver into their products to provide interoperability with the greatest number of database servers.

c. above all

Ans. b

98. Which Driver is preferable for using JDBC API in Applets.

a. Type - 1

b. Type - 2

c. Type - 3

d. Type – 4

Ans. d

99. Which of the following statements is true regarding the two tier model of the JDBC driver model.

a. In this java applications interact directly with the database.

b. A JDBC driver is required to communicate with the particular database management system that is being accessed.

c. This model is referred to as the client/server configuration where user is the client and the machine that has the database is called the user.

d. All of the above.

Ans. d

101. Fill in the blanks :- The cause of failing to load the appropriate JDBC drivers before calling the getConnection method, or it specifying an invalid JDBC URL--one that isn't recognized by your JDBC driver can result in the error \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ during a call to the DriverManager.getConnection method.

Ans. No suitable driver

102. Which of the following is false for the Type 4 drivers in java

a. Type 4 driver, or, "native protocol, pure Java" driver converts JDBC calls into the network protocol used by the database directly.

b. A Type 4 driver requires no client software, so it's ideal for deployment to browsers at runtime.

c. As Type 4 drivers are 100% Java, use Java sockets to connect to the database, and require no client-side data access code, they are ideal for applets or other download situations inside a firewall.

d. Type 4 drivers can’t be used with Netscape

Ans. d

103. Different types of exceptions in JDBC are

1. BatchUpdateException

2. DataTruncation

3. SQLException

4. SQLWarning

a. 1,2,3

b. 1,3,4

c. 1,2,4

d. 1,2,3,4

Ans. d

104. Which of the following describes the correct sequence of the steps involved in making a connection with a database.

1. Loading the driver

2. Process the results.

3. Making the connection with the database.

4. Executing the SQL statements.

a. 1,2,3,4

b. 1,3,4,2

c. 1,4,2,3

d. 4,1,2,3

Ans. b

105. State true or false :- The JDBC-ODBC bridge from Sun's Java Software does not provide network access to desktop databases like Microsoft access by itself.

a. True

b. False

Ans. a

106. Which of the following statement is false regarding the different type of statements in JDBC

a. Regular Statement (use createStatement method)

b. Prepared statement (use prepareStatement method)

c. Callable statement (use prepareCall).

d. Interim statement (use jdbcCall).

Ans. d

107. Fill in the blanks -- The full form of JDBC is--------- Ans. Java Database connectivity

108. Which of the following statements is false regarding the error returned by the driver manager return 'Data source name not found and no default driver specified Vendor: 0'.

a. This type of error occurs during an attempt to connect to a database with the bridge.

b. The error is coming from the ODBC driver manager.

c. The problem is due to the native libraries not present.

d. The error is due to the fact that an ODBC DSN (data source name) needs to be configured on the client machine

Ans. c

109. Which of the statements is true regarding loading a driver in JDBC.

1. registerDriver(Driver driver).

2. Class.forName(java.lang.String driverclass)

a. 1

b. 2

c. 1, 2

d. Neither of the above

Ans. c

110. Which of the following statement is false regarding call to stored procedure from JDBC.

a. Create a CallableStatement object.

b. A CallableStatement object contains a call to a stored procedure.

c. The execution call should be like CallableStatement cs = con.prepareCall(\"{call SHOW\_SUPPLIERS}\");

d. We need not make an instance of the Connection class before making a Callable statement.

Ans. d

111. Which of the following statement is false regarding the use of setAutoCommit() in JDBC

a. When a connection is created, it is in auto-commit mode.

b. If the value is true each individual SQL statement is treated as a transaction and will be automatically committed right after it is executed.

c. once auto-commit mode is disabled, no SQL statements will be committed until you call the method commit explicitly

d. By default the JDBC call is in auto-commit mode.

Ans. d

112. Fill in the blanks :- Which method is static synchronized in JDBC API \_\_\_\_\_\_\_\_\_

Ans. getConnection()

113. Which of the statements are true regarding availability of the integrated version of JDBC API and the JDBC-ODBC Bridge in JDK.

a. The JDK 1.1 and the Java 2 SDK, Standard Edition (formerly known as the JDK 1.2), contain both the JDBC API and the JDBC-ODBC Bridge.

b. The Java 2 SDK, Standard Edition, contains the JDBC 2.0 core API, does not include the JDBC 2.0 Optional Package, which is part of the Java 2 SDK, Enterprise Edition, or which you can download separately.

c. The JDK 1.1 and the Java 2 SDK, Standard Edition (formerly known as the JDK 1.2), contain both the JDBC API and the JDBC-ODBC Bridge as separate download.

d. The Java 2 SDK, Standard Edition, contains the JDBC 2.0 core API, and the JDBC 2.0 Optional Package.

Ans. a b

114. Which of the following values can be replaced in the place of 1 and 2 below Statement stmt = con.createStatement(1, 2);

a. ResultSet. TYPE\_FORWARD\_ONLY, ResultSet.CONCUR\_READ\_ONLY

b. ResultSet. TYPE\_SCROLL\_INSENSITIVE , ResultSet. CONCUR\_UPDATABLE

c. ResultSet. CONCUR\_UPDATABLE,ResultSet. TYPE\_SCROLL\_SENSITIVE

d. ResultSet. CONCUR\_UPDATABLE,ResultSet. TYPE\_FORWARD\_ONLY

Ans. a b

115. Which of the statement below does not correctly defines the difference between JDBC and ODBC ?

a. ODBC can be directly used with Java because it uses a C interface

b. ODBC makes uses of pointers which has been totally removed from JAVA

ODBC is from Microsoft while JDBC is from java applications

c. ODBC requires manual installation of the ODBC driver manager and driver on all client machines. While for JDBC driver are written in Java and JDBC code is automatically installable, secure and portable on all platforms.

Ans. a

116. State true or false :- ResultSet.CONCUR\_UPDATABLE used with the result set is used to update the rows directly in the database.

a. True

b. False

Ans a

117. Which of the following statement is false regarding the exceptions in JDBC

a. SQLWarning objects are a subclass of SQLException that deal with database access warnings

b. Warnings stop the execution of an application, as exceptions do; they simply alert the user that something did not happen as planned

c. Connection object has a getWarning() method in it.

d. Statement and ResultSet objects have getWarning() methods in it.

Ans. b

118. Which statements about JDBC are true?

a. JDBC is an API to connect to relational-, object- and XML data sources

b. JDBC stands for Java DataBase Connectivity

c. JDBC is an API to access relational databases, spreadsheets and flat files

d. JDBC is an API to bridge the object-relational mismatch between OO programs and relational databases

Ans: b,c

119.Which packages contain the JDBC classes?

a. java.jdbc and javax.jdbc

b. java.jdbc and java.jdbc.sql

c. java.sql and javax.sql

d. java.rdb and javax.rdb

Ans:c

120. Which type of driver provides JDBC access via one or more ODBC drivers?

a. Type 1 driver

b. Type 2 driver

c. Type 3 driver

d. Type 4 driver

Ans: a

121. Which type of driver converts JDBC calls into the network protocol used by the database management system directly?

a. Type 1 driver

b. Type 2 driver

c. Type 3 driver

d. Type 4 driver

Ans: d

122.Which type of Statement can execute parameterized queries?

a. PreparedStatement

b. ParameterizedStatement

c. ParameterizedStatement and CallableStatement

d. All kinds of Statements (i.e. which implement a sub interface of Statement)

Ans: a

123. How can you retrieve information from a ResultSet?

a. By invoking the method get(..., String type) on the ResultSet, where type is the database type

b. By invoking the method get(..., Type type) on the ResultSet, where Type is an object which represents a database type

c. By invoking the method getValue(...), and cast the result to the desired Java type.

d. By invoking the special getter methods on the ResultSet: getString(...), getBoolean (...), getClob(...),...

Ans: d

124.How can you execute DML statements (i.e. insert, delete, update) in the database?

a. By making use of the InsertStatement, DeleteStatement or UpdateStatement classes

b. By invoking the execute(...) or executeUpdate(...) method of a normal Statement object or a sub-interface object thereof

c. By invoking the executeInsert(...), executeDelete(...) or executeUpdate(...) methods of the DataModificationStatement object

d. By making use of the execute(...) statement of the DataModificationStatement object

Ans: b

125.How do you know in your Java program that a SQL warning is generated as a result of executing a SQL statement in the database?

a. You must catch the checked SQLException which is thrown by the method which executes the statement

b. You must catch the unchecked SQLWarningException which is thrown by the method which executes the statement

c. You must invoke the getWarnings() method on the Statement object (or a sub interface thereof)

d. You must query the ResultSet object about possible warnings generated by the database

Ans: c

126. What is, in terms of JDBC, a DataSource?

a. A DataSource is the basic service for managing a set of JDBC drivers

b. A DataSource is the Java representation of a physical data source

c. A DataSource is a registry point for JNDI-services

d. A DataSource is a factory of connections to a physical data source

Ans: d

127. What is the meaning of ResultSet.TYPE\_SCROLL\_INSENSITIVE

a. This means that the ResultSet is insensitive to scrolling

b. This means that the Resultset is sensitive to scrolling, but insensitive to updates, i.e. not updateable

c. This means that the ResultSet is sensitive to scrolling, but insensitive to changes made by others

d. The meaning depends on the type of data source, and the type and version of the driver you use with this data source

Ans: c

128. Are ResultSets updateable? | JDBC MCQs

a. Yes, but only if you call the method openCursor() on the ResultSet, and if the driver and database support this option

b. Yes, but only if you indicate a concurrency strategy when executing the statement, and if the driver and database support this option

c. Yes, but only if the ResultSet is an object of class UpdateableResultSet, and if the driver and database support thisoption

d. No, ResultSets are never updateable. You must explicitly execute DML statements (i.e. insert, delete and update) to change the data in the underlying database

Ans: b

129. What statements are correct about JDBC transactions ?

a. A transaction is a set of successfully executed statements in the database

b. A transaction is finished when commit() or rollback() is called on the Connection object,

c. A transaction is finished when commit() or rollback() is called on the Transaction object

d. A transaction is finished when close() is called on the Connection object.

Ans: d

130. How can you start a database transaction in the database?

a. By asking a Transaction object to your Connection, and calling the method begin() on it

b. By asking a Transaction object to your Connection, and setting the autoCommit property of the Transaction to false

c. By calling the method beginTransaction() on the Connection object

d. By setting the autoCommit property of the Connection to false, and execute a statement in the database

Ans: d

131. What is the meaning of the transaction isolation level TRANSACTION\_REPEATABLE\_READ

a. Dirty reads, non-repeatable reads and phantom reads can occur

b. Dirty reads are prevented; non-repeatable reads and phantom reads can occur

c. Dirty reads and non-repeatable reads are prevented; phantom reads can occur

d. Dirty reads, non-repeatable reads and phantom reads are prevented

Ans: c

132. What statements are correct about positioned updates (i.e. cursor updates) in ResultSets?

a. Using the cursor technique is currently the only possible way to change the data in the current row of a ResultSet

b. Insert statements are only supported when using scrollable cursors.

c. Only scrollable updateable ResultSets can use this approach to change the data in the current row of a ResultSet

d. The name of the cursor is specified by the setCursorName(String name) method the Statement object.

Ans: b,d

133. How can you execute a stored procedure in the database?

a. Call method execute() on a CallableStatement object

b. Call method executeProcedure() on a Statement object

c. Call method execute() on a StoredProcedure object

d. Call method run() on a ProcedureCommand object

Ans: a

134. What happens if you call the method close() on a ResultSet object?

a. the method close() does not exist for a ResultSet. Only Connections can be closed.

b. the database and JDBC resources are released

c. you will get a SQLException, because only Statement objects can close ResultSets

d. the ResultSet, together with the Statement which created it and the Connection from which the Statement was retrieved, will be closed and release all database and JDBC resources

Ans: b

135.What happens if you call deleteRow() on a ResultSet object?

a. The row you are positioned on is deleted from the ResultSet, but not from the database.

b. The row you are positioned on is deleted from the ResultSet and from the database

c. The result depends on whether the property synchronizeWithDataSource is set to true or false

d. You will get a compile error: the method does not exist because you can not delete rows from a ResultSet

Ans: b

136.

What statements are correct about batched insert and updates?

a. To create a batch of insert and update statements, you create an object of type Batch, and call the method addStatement(String statement) for each statement you want to execute in the batch

b. Batch insert and updates are only possible when making use of parameterized queries.

c. To do a batched update/insert, you call addBatch(String statement) on a Statement object for each statement you want to execute in the batch

d. To execute a batched update/insert, you call the executeBatch() method on a Statement object

Ans: c,d

137.

What is correct about DDL statements (create, grant,...)?

a. DDL statements are treated as normal SQL statements, and are executed by calling the execute() method on a Statement (or a sub interface thereof) object

b. To execute DDL statements, you have to install additional support files

c. DDL statements can not be executed by making use of JDBC, you should use the native database tools for this.

d. Support for DDL statements will be a feature of a future release of JDBC

Ans: a

138. The JDBC-ODBC Bridge supports multiple concurrent open statements per connection?

1:01 AM Interview Preparation Questions No comments

a. True

b. False

Ans: a

139. Which of the following allows non repeatable read in JDBC Connection?

a. TRANSACTION\_READ\_UNCOMMITTED

b. TRANSACTION\_READ\_COMMITTED

c. TRANSACTION\_SERIALIZABLE

d. TRANSACTION\_REPEATABLE\_READ

Ans: d

140. Which of the following statements is false as far as different type of statements is concern in JDBC?

a. Regular Statement

b. Prepared Statement

c. Callable Statement

d. Interim Statement

Ans: d

141. Which of the following methods are needed for loading a database driver in JDBC?

a. registerDriver() method

b. Class.forName()

c. Both A and B

d. getConnection()

Ans: c

142. Which of the following is false as far 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

Ans: d

143. To execute a stored procedure “totalStock” in a database server, which of the following code snippet is used?

a. Statement stmt = connection.createStatement();stmt.execute("totalStock()");

b. CallableStatement clbstmnt = con.prepareCall("{call totalStock}");cs.executeQuery();

c. StoreProcedureStatement stmt=connection.createStoreProcedure("totalStock()");spstmt.executeQuery();

d. PrepareStatement pstmt = connection.prepareStatement("totalStock()");pstmt.execute();

Ans: b

144. Which driver is efficient and always preferable for using JDBC applications?

a. Type – 4

b. Type – 1

c. Type – 3

d. Type – 2

Ans: a

145. JDBC facilitates to store the java objects by using which of the methods of Prepared Statement

1:16 AM Interview Preparation Questions No comments

1. setObject ()

2. setBlob()

3. setClob()

a. 1, 2

b. 1,2,3

c. 1,3

d. 2,3

Ans: b

146. Which statement is static and synchronized in JDBC API?

a. executeQuery()

b. executeUpdate()

c. getConnection()

d. prepareCall()

Ans: c

147. The JDBC-ODBC bridge is \_\_\_\_\_\_\_.

a. Three tiered

b. Multithreaded

c. Best for any platform

d. All of the above

Ans: b

148.

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. Boolean

d. char

Ans: a

149. The class java.sql.Timestamp has its super class as

a. java.sql.Time

b. java.util.Date

c. java.util.Time

d. None of the above

Ans: b

150. Which of the following methods finds the maximum number of connections that a specific driver can obtain?

a. Database.getMaxConnections

b. Connection.getMaxConnections

c. DatabaseMetaData.getMaxConnections

d. ResultSetMetaData.getMaxConnections

Ans: c

151. Which of the following methods finds the maximum number of connections that a specific driver can obtain?

a. Database.getMaxConnections

b. Connection.getMaxConnections

c. DatabaseMetaData.getMaxConnections

d. ResultSetMetaData.getMaxConnections

Ans: c

152. Are prepared statements actually compiled?

a. Yes, they compiled

b. No, they are bound by the JDBC driver

Ans: a

153. When the message “No Suitable Driver” occurs?

a. When the driver is not registered by Class.forname() method

b. When the user name, password and the database does not match

c. When the JDBC database URL passed is not constructed properly

d. When the type 4 driver is used

Ans: c

154. Which driver is called as thin-driver in JDBC?

a. Type-4 driver

b. Type-1 driver

c. Type-3 driver

d. Type-2 driver

Ans: a

155. How many transaction isolation levels are defined in java.sql.Connection interface?

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a. 4

b. 3

c. 5

d. 2

Ans: c

156. Which method is used to perform DML statements in JDBC?

a. execute()

b. executeQuery()

c. executeUpdate()

d. executeResult()

Ans: c

157. What is the disadvantage of Type-4 Native-Protocol Driver?

a. At client side, a separate driver is needed for each database.

b. Type-4 driver is entirely written in Java

c. The driver converts JDBC calls into vendor-specific database protocol

d. It does not support to read MySQL data.

Ans. a

158. Which isolation level prevents dirty read in JDBC, connection class.

A. TRANSACTION\_READ\_ COMMITTED

B. TRANSACTION\_UNREAD\_ COMMITTED

Ans: A

159. State true or false . Does the JDBC-ODBC Bridge support multiple concurrent open statements per connection ?

A. TRUE

B. FALSE

Ans: A

160. Which of the following describes the correct sequence of the steps involved in making a connection with a database.

1. Loading the driver

2. Process the results.

3. Making the connection with the database.

4. Executing the SQL statements.

A. 1,3,4,2

B. 1,2,3,4

C. 2,1,3,4

D. 4,1,2,3

Ans: A

161. Two parts of JDBC 2.0 API are

The JDBC 2.0 core API (the java.sql package), which is included in the JavaTM 2 SDK, Standard Edition 5. The JDBC 2.0 Optional Package API (the javax.sql package), which is available separately or as part of the Java 2 SDK, Enterprise Edition

A. TRUE

B. FALSE

Ans: A

162. Which of the following values can be replaced in the place of 1 and 2 below Statement stmt = con.createStatement(1, 2);

A. ResultSet. TYPE\_FORWARD\_ONLY, ResultSet.CONCUR\_READ\_ONLY ResultSet. TYPE\_SCROLL\_INSENSITIVE , ResultSet. CONCUR\_UPDATABLE

B. ResultSet. TYPE\_SCROLL\_INSENSITIVE , ResultSet. CONCUR\_UPDATABLE, ResultSet. TYPE\_FORWARD\_ONLY,ResultSet.CONCUR\_READ\_ONLY

Ans: A

163.State true or false. Is the JDBC-ODBC bridge multithreaded ?

A. TRUE

B. FALSE

Ans: A

164. State true or false Can we retrieve a whole row of data at once, instead of calling an individual ResultSet.getXXX method for each column ?

A. TRUE

B. FALSE

Ans: A

165. State true or false . Does the JDBC-ODBC Bridge support multiple concurrent open statements per connection?

A. TRUE

B. FALSE

Ans: A

166.

\_\_\_\_\_\_\_\_ is an open source DBMS product that runs on UNIX, Linux and Windows.

A. MySQL

B. JSP/SQL

C. JDBC/SQL

D. Sun ACCESS

Ans: A

167. What servlet processor was developed by Apache Foundation and Sun?

A. Apache Tomcat

B. Sun servlet processor

C. Apache Web server

D. None of the above is correct.

Ans: A

*:*

* *168. Which of the following statements loads the JDBC-ODBC driver?*
* *Class.loadClass(sun.jdbc.odbc.JdbcOdbcDriver)*
* ***Class.forName("sun.jdbc.odbc.JdbcOdbcDriver")***
* *Class.forName(sun.jdbc.odbc.JdbcOdbcDriver)*
* *Class.loadClass("sun.jdbc.odbc.JdbcOdbcDriver")*

*169. Which of the following statements are true about CallableStatement ?*

* *CallableStatement is more efficient than PreparedStatement.*
* ***CallableStatement is a subinterface of PreparedStatement***
* ***CallableStatement is for executing predefined functions and procedures.***
* *CallableStatement is for SQL query statements only. You cannot create a CallableStatement for SQL update statements.*

*170. You run a SELECT statement, and multiple duplicates of values are retrieved. What keyword can you use to retrieve only the non duplicate data?*

* *INDIVIDUAL*
* *SEPARATE*
* *DUBPLICATE*
* ***DISTINCT***

*171. What information may be obtained from a ResultSetMetaData object?*

* *database URL and product name*
* *JDBC driver name and version*
* ***number of columns in the result set***
* *number of rows in the result set*

*172. What information may be obtained from a DatabaseMetaData object?*

* ***JDBC driver name and version***
* *maximum number of connections to the database*
* ***database URL and product name***
* *maximum table name length and maximum number of columns in a table*

*173. In a relational data model, \_\_\_\_\_\_\_\_\_ imposes constraints on the data.*

* *Structure*
* *Language*
* ***Integrity***
* *SQL*

*174. What happens if you call the method close() on a ResultSet object?*

* ***the database and JDBC resources are released***
* *you will get a SQLException, because only Statement objects can close ResultSets*
* *the ResultSet, together with the Statement which created it and the Connection from which the Statement was retrieved, will be closed and release all database and JDBC resources*
* *the method close() does not exist for a ResultSet. Only Connections can be closed*

*175. Which of the following statements are true about PreparedStatement?*

* ***PreparedStatement is a subinterface of Statement***
* ***PreparedStatement is efficient for repeated executions.***
* ***The parameters in a prepared statement are denoted using the ? sign.***
* *PreparedStatement is for SQL query statements only. You cannot create a PreparedStatement for SQL update statements.*

*176. Are ResultSets updateable?*

* *No, ResultSets are never updateable. You must explicitly execute DML statements (i.e.insert, delete and update) to change the data in the underlying database*
* *Yes, but only if you call the method openCursor() on the ResultSet, and if the driver and database support this option*
* ***Yes, but only if you indicate a concurrency strategy when executing the statement, and if the driver and database support this option***
* *Yes, but only if the ResultSet is an object of class UpdateableResultSet, and if the driver and database support this option*

*177. What statements are correct about batched insert and updates?*

* ***To do a batched update/insert, you call addBatch(String statement) on a Statement object for each statement you want to execute in the batch***
* *To create a batch of insert and update statements, you create an object of type Batch,and call the method addStatement(String statement) for each statement you want to execute in the batch*
* *None of the above*
* *Batch insert and updates are only possible when making use of parameterized queries.*

*178. What is the return value from  
stmt.executeUpdate("insert into T values (100, 'Smith')")*

1. ***an int value indicating how many rows are effected from the invocation***
2. *void*
3. *an object that contains the status of the execution*
4. *a value indicating whether the SQL statement has been executed successfully*

*179. What is the function of Class.forName?*

* *Both are false*
* *In establishing a connection is to have the appropriate driver connect to the DBMS*
* *Both are true*
* ***It is used to create an instance of a driver and register it with the DriverManager***

*180. What statements are correct about JDBC transactions*

* *A transaction is a set of successfully executed statements in the database*
* *All of the above*
* *A transaction is finished when commit() or rollback() is called on the Transaction object*
* *A* ***transaction is finished when commit() or rollback() is called on the Connection object***

*181. In a relational data model, \_\_\_\_\_\_\_\_\_ defines the representation of the data.*

* *Language*
* ***Structu****re*
* *Integrity*
* *SQL*

*182. Where is com.mysql.jdbc.Driver located?*

* *in a JAR file ojdbc14.ja*
* *in a JAR file classes12.jar*
* ***in a JAR file mysqljdbc.jar***
* *in the standard Java library bundled with JDK*

*183. In your program you want to use the JDBC-ODBC Bridge driver. What code do you use?*

* ***Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");***
* *Class.callName("sun.jdbc.odbc.JdbcOdbcDriver");*
* *Class.Name.init("sun.jdbc.odbc.JdbcOdbcDriver");*
* *Class.callfunc("JdbcOdbcDriver");*

*184. Suppose a callable statement is created as follows:  
  
CallableStatement callableStatement = connection.prepareCall(  
"{call sampleProcedure(?, ?, ?)}");  
  
Assume that the first parameter is an IN parameter with value John. To set this parameter value, use*

1. ***callableStatement.setString(1, "John");***
2. *callableStatement.setString(0, "John");*
3. *callableStatement.setString(1, 'John');*
4. *callableStatement.setString(0, 'John');*

*185. Which of the following are interfaces?*

* ***ResultSet***
* *DriverManager*
* ***Connection***
* ***Statement***

*186. Which packages contain the JDBC classes?*

* *java.jdbc and javax.jdbc*
* ***java.sql and javax.sql***
* *java.rdb and javax.rdb*
* *java.jdbc and java.jdbc.sql*

*187. If a prepared statement preparedStatement is a SQL SELECT statement, you execute the statement using \_\_\_\_\_\_\_\_\_.*

* *preparedStatement.query();*
* *preparedStatement.execute();*
* *preparedStatement.executeUpdate();*
* ***preparedStatement.executeQuery();***

*188. Suppose a prepared statement is created as follows:  
  
Statement preparedStatement = connection.prepareStatement  
("insert into Student (firstName, mi, lastName) " +  
"values (?, ?, ?)");  
  
To set a value John to the first parameter, use*

1. *preparedStatement.setString(0, 'John');*
2. *preparedStatement.setString(0, "John");*
3. *preparedStatement.setString(1, 'John');*
4. ***preparedStatement.setString(1, "John****");*

*189. SQL \_\_\_\_\_\_\_\_ statements may change the contents of a database.*

* ***SELECT***
* *UPDATE*
* *DELETE*
* *INSERT*

*190. Database meta data are retrieved through \_\_\_\_\_\_\_\_\_\_\_\_.   
explanation:  
Explanation: getMetaData() on a Connection object returns a DatabaseMetaData object.*

1. *a Statement object*
2. *a PreparedStatement object*
3. *a ResultSet Object*
4. ***a Connection object***

*191. Suppose that your program accesses MySQL or Oracle database. Which of the following statements are true?*

* ***If the driver for MySQL and Oracle are not in the classpath, the program will have a runtime error, indicating that the driver class cannot be loaded.***
* *If the driver for MySQL and Oracle are not in the classpath, the program will have a syntax error.*
* ***If the database is not available, the program will have a runtime error, when attempting to create a Connection object.***
* *If the database is not available, the program will have a syntax error.*

*192. What is correct about DDL statements (create, grant,...)?*

* ***DDL statements are treated as normal sql statements, and are executed by calling the execute() method on a Statement (or a sub interface thereof) object***
* *Support for DDL statements will be a feature of a future release of JDBC*
* *DDL statements can not be executed by making use of JDBC, you should use the native database tools for this.*
* *To execute DDL statements, you have to install additional support files*

*193. To execute a SELECT statement "select \* from Address" on a Statement object stmt, use*

* *stmt.executeUpdate("select \* from Address");*
* *stmt.query("select \* from Address");*
* *stmt.execute("select \* from Address");*
* ***stmt.executeQuery("select \* from Address");***

*194. What is, in terms of JDBC, a DataSource?*

* *A DataSource is the Java representation of a physical data source*
* *A DataSource is the basic service for managing a set of JDBC drivers*
* *A DataSource is a registry point for JNDI-services*
* ***A DataSource is a factory of connections to a physical data source***

*195. How do you know in your Java program that a SQL warning is generated as a result of executing a SQL statement in the database?*

* ***You must invoke the getWarnings() method on the Statement object (or a sub interface thereof)***
* *You must query the ResultSet object about possible warnings generated by the database*
* *You must catch the checked SQLException which is thrown by the method which executes the statement*
* *You must catch the unchecked SQLWarningException which is thrown by the method which executes the statement*

*196. To connect to a local MySQL database named test, use*

* *Connection connection = DriverManager.connect("jdbc:mysql://localhost/test");*
* *Connection connection = DriverManager.getConnection(jdbc:mysql://localhost/test);*
* *Connection connection = DriverManager.getConnection("mysql:jdbc://localhost/test");*
* ***Connection connection = DriverManager.getConnection("jdbc:mysql://localhost/test");***

*197. Result set meta data are retrieved through \_\_\_\_\_\_\_\_\_\_\_\_.*

* *a PreparedStatement object*
* ***a ResultSet Object***
* *a Statement object*
* *a Connection object*

*198. To create a statement on a Connection object conn, use*

* *Statement statement = Connection.createStatement();*
* *Statement statement = connection.create();*
* ***Statement statement = conn.createStatement();***
* *Statement statement = conn.statement();*

*199. How can you execute a stored procedure in the database?*

* ***Call method execute() on a CallableStatement object***
* *Call method executeProcedure() on a Statement object*
* *Call method run() on a ProcedureCommand object*
* *Call method execute() on a StoredProcedure object*

*200. How can you retrieve information from a ResultSet?*

* *By invoking the method get (..., String type) on the ResultSet, where type is the database type*
* *By invoking the method get (..., Type type) on the ResultSet, where Type is an object which represents a database type*
* ***By invoking the special getter methods on the ResultSet: getString (...), get Boolean (...),getClob (...),...***
* *By invoking the method getValue (...), and cast the result to the desired java type*

*201. Invoking Class.forName method may throw \_\_\_\_\_\_\_\_\_\_\_.*

* *SQLException*
* *IOException*
* ***ClassNotFoundException***
* *RuntimeException*

*202. Which statements about JDBC is true?*

* ***JDBC stands for Java DataBase Connectivity***
* *None of the above*
* *JDBC is an API to bridge the object-relational mismatch between OO programs and relational databases*
* *JDBC is an API to connect to relational, object- and XML data sources*

*203. Suppose a callable statement is created as follows:  
  
CallableStatement callableStatement = connection.prepareCall(  
"{call sampleProcedure(?, ?, ?)}");  
  
Assume that the second parameter is an OUT parameter with value John. To register this parameter, use*

1. *none of them*
2. *callableStatement.registerOutParameter(0, java.sql.Types.STRING);*
3. ***callableStatement.registerOutParameter(2, java.sql.Types.STRING);***
4. *callableStatement.registerOutParameter(1, java.sql.Types.STRING);*

*204. How can you execute DML statements (i.e. insert, delete, update) in the database?*

* *By making use of the execute(...) statement of the DataModificationStatement object*
* ***By invoking the execute(...) or executeUpdate(...) method of a normal Statement object or a sub-interface object thereof***
* *By making use of the InsertStatement, DeleteStatement or UpdateStatement classes*
* *By invoking the executeInsert(...), executeDelete(...) or executeUpdate(...) methods of the DataModificationStatement object*

*205. A database URL for a MySQL database named test on host panda.armstrong.edu is \_\_\_\_\_\_\_\_.*

* *jdbc.mysql://panda.armstrong.edu/test*
* *jdbc:mysql:/panda.armstrong.edu/test*
* ***jdbc:mysql://panda.armstrong.edu/test***
* *jdbc.mysql.//panda.armstrong.edu/test*

*206. How can you start a database transaction in the database?*

* ***By setting the autoCommit property of the Connection to false, and execute a statement in the database***
* *By asking a Transaction object to your Connection, and calling the method begin() on it*
* *By asking a Transaction object to your Connection, and setting the autoCommit property of the Transaction to false*
* *By calling the method beginTransaction() on the Connection object*

*207. Which type of Statements can execute parameterized queries?*

* *All kinds of Statements (i.e. which implement a sub interface of Statement)*
* *ParameterizedStatement*
* *ParameterizedStatement and CallableStatement*
* ***PreparedStatement***

*208. Analyze the following code:  
ResultSet resultSet = statement.executeQuery  
("select firstName, mi, lastName from Student where lastName "  
+ " = 'Smith'");  
System.out.println(resultSet.getString(1))*

1. *resultSet.getString(1) returns the mi field in the result set.*
2. *If the SQL SELECT statement returns no result, resultSet is null.*
3. ***resultSet.getString(1) returns the firstName field in the result set.***
4. ***The program will have a runtime error, because the cursor in resultSet does not point to a row. You must use resultSet.next() to move the cursor to the first row in the result set. Subsequently, resultSet.next() moves the cursor to the next row in the result set.***

*209. What happens if you call deleteRow() on a ResultSet object?*

* ***The row you are positioned on is deleted from the ResultSet and from the database***
* *The row you are positioned on is deleted from the ResultSet, but not from the database*
* *You will get a compile error: the method does not exist because you can not delete rows from a ResultSet*
* *The result depends on whether the property synchonizeWithDataSource is set to true or false*

*210. What is the meaning of ResultSet.TYPE\_SCROLL\_INSENSITIVE*

* *The meaning depends on the type of data source, and the type and version of the driver you use with this data source*
* *This means that the ResultSet is insensitive to scrolling*
* ***This means that the ResultSet is sensitive to scrolling, but insensitive to changes made by others***
* *This means that the Resultset is sensitive to scrolling, but insensitive to updates, i.e. not updateable*

*211. Which of the following statements are true?*

* ***You may load multiple JDBC drivers in a program.***
* ***You can send queries and update statements through a Statement object.***
* *You may create multiple statements from one connection.*
* ***You may create multiple connections to a database.***

*212. Which one of the following will not get the data from the first column of ResultSet rs, returned from executing the following SQL statement: SELECT name, rank, serialNo FROM employee.?*

* *rs.getString(1)*
* *none of them*
* *rs.getString(“name”)*
* ***rs.getString(2)***

*213. A database URL for an access database source test is \_\_\_\_\_\_\_\_.*

* *sun.jdbc:odbc:test*
* ***jdbc:odbc:test***
* *jdbcodbc:test*
* *test*

*RMI:*

*1.*  *Which of the following statements are true?*

***1.***  ***In socket-level programming, a client operation to send data requires a server operation to read it. The implementation of client and server at the socket-level is tightly synchronized.***

***2.***  ***RMI enables you to program at a higher level of abstraction. It hides the details of socket server, socket, connection, and sending or receiving data. It even implements a multithreading server under the hood, whereas with socket-level programming you have to explicitly implement threads for handling multiple clients.***

***3.***  ***RMI applications are scalable and easy to maintain. You can change the RMI server or move it to another machine without modifying the client program except for resetting the URL to locate the server.***

***4.***  ***RMI clients can directly invoke the server method, whereas socket-level programming is limited to passing values.***

*2.*  *To start an RMI registry, use \_\_\_\_\_\_\_\_\_\_\_\_ from the command window.*

*1.*  *rmiregistry*

*2.*  *rmiregistry 7000*

***3.***  ***start rmiregistry 7000***

***4.***  ***start rmiregistry***

*3.*  *To locate a remote object with a name t at port 7000 on host panda.armstrong.edu, use*

*1.*  *Remote remoteObj = Name.lookup("//panda.armstrong.edu:7000/t");*

*2.*  *Remote remoteObj = Name.lookup("rmi://panda.armstrong.edu:7000/t");*

***3.***  ***Remote remoteObj = Naming.lookup("rmi://panda.armstrong.edu:7000/t");***

*4.*  *Remote remoteObj = Name.lookup("http://panda.armstrong.edu:7000/t");*

*4.*  *RMI is about \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.*

*1.*  *passing objects between a server and a client*

*2.*  *java.lang.Cloneable*

***3.***  ***accessing remote objects and invoking methods from remote objects.***

*4.*  *passing primitive data between a server and a client*

*5.*  *Each remote object has a unique name identified by an URL with the protocol rmi as follows:*

*1.*  *http://host/name*

*2.*  *http://host:port/name*

***3.***  ***//host:port/name***

*4.*  *rmi://host:port/name*

*6.*  *Which provides the naming services for the server to register the object and for the client to locate the object.*

*1.*  *Server implementation*

*2.*  ***RMI Registry***

*3.*  *Server stub*

*4.*  *Server object interface*

*7.*  *Which is an object that resides on the server host, communicates with the stub and the actual server object.*

*1.*  *Server object interface*

*2.*  *Server stub*

***3.***  ***RMI Registry***

*4.*  *Server Skeleton*

*8.*  *\_\_\_\_\_\_\_\_\_\_\_\_is a class that implements the remote object interface.*

*1.*  *RMI Registry*

*2.*  *Server object interface*

*3.*  *Server stub*

***4.***  ***Server implementation***

*9.*  *To register a remote object o with a name t at port 7000 on host panda.armstrong.edu, use*

*1.*  *Name.rebind("rmi://panda.armstrong.edu:7000/t", o);*

*2.*  *Name.bind("rmi://panda.armstrong.edu:7000/t", o);*

***3.***  ***Naming.rebind("rmi://panda.armstrong.edu:7000/t", o);***

***4.***  ***Naming.bind("rmi://panda.armstrong.edu:7000/t", o);***

*10.A remote object must be an instance of \_\_\_\_\_\_\_\_\_\_\_\_\_\_.*

*1.*  *java.rmi.RemoteObject*

*2.*  *java.lang.Cloneable*

*3.*  ***java.rmi.Remote***

*4.*  *java.io.Serializable*

*11.\_\_\_\_\_\_\_\_\_\_\_\_ is a subinterface of java.rmi.Remote that defines the methods for the server object.*

*1.*  ***Server object interface***

*2.*  *RMI Registry*

*3.*  *Server implementation*

*4.*  *Server stub*

*12.Assume that the file named policy contains the permission for registering a remote object with an RMI registry. To run the program (e.g.,RegisterWithRMIServer) that registers a remote object with an RMI registry, use the command \_\_\_\_\_\_\_\_\_ from the command window.*

*1.*  *java RegisterWithRMIServer java ?Djava.security.policy=policy*

*2.*  *java RegisterWithRMIServer*

***3.***  ***java ?Djava.security.policy=policy RegisterWithRMIServer***

*4.*  *java ?Dpolicy=policy RegisterWithRMIServer*

*13.Which of the following statements are true when passing arguments in a remoter method call.*

***1.***  ***Local object types, such as java.lang.String, are also passed by value, but this is completely different from passing an object parameter in a local call. Any object can be used as a parameter in a remote call as long as it is serializable. The stub serializes the object parameter and sends it in a stream across the network. The skeleton deserializes the stream into an object.***

***2.***  ***Remote object types are passed differently from local objects. When a client invokes a remote method with a parameter of a remote object type, the stub of the remote object is passed. The server receives the stub and manipulates the parameter through it.***

***3.***  ***When a client invokes a remote method with parameters, passing the parameters is handled by the stub and the skeleton.***

***4.***  ***Primitive data types, such as char, int, double, or boolean, are passed by value like a local call.***

*14.Which is a utility that registers remote objects and provides naming services for locating objects.*

*1.*  *Server implementation*

*2.*  ***RMI Registry***

*3.*  *Server Skeleton*

*4.*  *Server object interface*

*15.Which is an object that resides on the client host and serves as a surrogate for the remote server object.*

*1.*  ***Server stub***

*2.*  *Server Skeleton*

*3.*  *Server implementation*

*4.*  *Server object interface*

*16.To encode arguments and invoke a method on a remote object an RMI client uses local-*

*1.*  *prototype*

*2.*  *skeleton*

*3.*  *all of them*

***4.***  ***stub***