**1. What is API? Give example**.

**Answe**r- API stands for application programming interface. API is used to communicate between one software to another software. it acts like interface between two s/w.

**Ex-** JDBC, Servlet

**2. what is JDBC**?

**Answer-** JDBC stands for java database connectivity. JDBC is used to connect with java application to database server

**3. what is JDBC Driver?**

**Answer-** Driver is s/w which is given by respective database and it contains implementation classes. Which is needed for interface present in JDBC.

**4 types of JDBC Driver?**

**Answer-** there are four JDBC driver

1. JDBC-ODBC Bridge Driver open database driver
2. Native-API Driver
3. Network Protocol Driver
4. Thin Driver

**5. steps of JDBC?**

**Answer-** There are five steps of JDBC

1. Load or register the Driver
2. Create connection
3. Create statement
4. Execute Statement
5. Close connection

**6. What is ResultSet? why we use it**?

**7. how to create statements? explain it.**

**Answer-** we can create statement by using below given interfaces

1. statement
2. Prepared Statement

**Statement-**

1. it is an interface present in java.sql package
2. we can create statement object by using createStatement() method.
3. Create connection method present in connection object
4. Create statement method is non static method
5. It throws the SQL exception
6. Statement interface is used to execute static query

**Statement stm = con.createStatment();**

**8. how to create connection explain it ?**

**Answer**- Connection is second step of JDBC

1. connection is an interface present in java.sql package
2. we create connection object to established between java application & database server.
3. Connection interface contains inbuilt method to create connection. The method name is getConnection()
4. The syntax is- Connection con= DriverManager.getConnection(“URL”, “username”, “Password”)
5. DriverManager – It is helper class It is used to create implementation object for connection interface.

**9. How to load the driver. explain it?**

**Answer-** Load the driver it is first step of JDBC

1. In this step we have take the driver software from the database vendor
2. We have to load the implementation classes inside JVM memory
3. Loading the **.Class** file into JVM memory
4. We have use a **forName()** the syntax is Class.forName(“ fully qualified class name”);
5. The fully qualified class Name is- **packageName.subpackageName.ClassName**

**10. what is class loading?**

**Answer-** Loading the .class file into JVM memory is called as class loading

11. what is JAR file?

**12. How to execute query? explain all method**.

**13. what is return type of execute query method?**

**Answer**- The return type of execute query is **ResultSet**

**14. How to execute dynamic query?**

**Answer**- We can execute the dynamic query by using Prepared Statement .

We can create Prepared statement implementation object by calling prepareStatement()

prepareStatement() will take “SQL” query in the form of string & it returns the PreparedStatement object

we use delimiter or placeholder (?) to pass value during runtime

we have use two method like setX & getX

15. what is delimiter/placeholder?

**16. how to store data inside delimiter?**

**Answer-** setX (delimiter position, data)

1. delimiter position always starts from one
2. Data- it will take the data for assign the value to particular delimiter
3. X indicates that datatype of value.

**17. what is the need of closing connection?**

**Ans-** Releases the Connection object's database and JDBC resources immediately.

**18. Difference Between** **execute (), executUpdate (), executeQuery ()**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **execute ()** | **executUpdate ()** | **executeQuery ()** |
| **Return Type** | 1) Return type is boolean | Return type is integer | Return type is ResultSet |
| **statement** | 2) DML, DQL, DTL | DML | DQL |

**Servlet Questions**

1. What is servlet

2.Why we used servlet

3. How to create servlet

4. Difference Between GenericServlet & HttpServlet

5. Explain: init(), service(), destroy()

6. How to Fetch the FORM data

7. How to register the servlet

8. Explain: servletContext, ServletConfiig, ServletDispatcher

9. What is sendReirect

10. Explain servlet life cycle

11. What is session

12. How to create session in Http Protocol