Step 3: Open a connection: Requires using the DriverManager.getConnection( ) method to create a Connection object, which represents a physical connection with the database.

Step 4: Execute a query: Requires using an object of type Statement for building and submitting an SQL statement to the database.

Step 5: Extract data from result set: Requires that you use the appropriateResultSet.get( ) method to retrieve the data from the result set.

Step 6: Clean up the environment: Requires explicitly closing all database resources versus relying on the JVM's garbage collection.

For example,

```
//Step 1:   Import required packages
import java.sql.*;
public class JdbcCon
{
   // JDBC driver name and database URL
   static final String JDBC_DRIVER = "com.sql.jdbc.Driver";
   static final String DB_URL = "jdbc:sql://localhost/EMPE";
   // Database credentials
   static final String UNAME = "username";
   static final String UPASS = "password";
   public static void main(String[] args)
   {
      Connection con = null;
      Statement stmtt = null;
      try
      {
         //Step 2: Register JDBC driver
         Class.forName("com.mysql.jdbc.Driver");
         //Step 3:   Open a connection
         System.out.println("Connecting to database...");
         con = DriverManager.getConnection(DB_URL,UNAME ,UPASS);
         //Step 4:   Execute a query
         System.out.println("Creating statement...");
         stmtt = conn.createStatement();
         String mysql;
         sql = "SELECT id, firstname, lastname, age FROM student";
         ResultSet rts = stmtt.executeQuery(sql);
         //Step 5:  Extract data from result set
         while(rts.next())
         {
            //Retrieve by column name
            int id = rts.getInt("id");
            int age = rts.getInt("yage");
            String first = rts.getString("first");
```

```java
                String last = rts.getString("last");
                //Display values
                System.out.print("ID: " + id);
                System.out.print(", YourAge: " + age);
                System.out.print(", First: " + firstname);
                System.out.println(", Last: " + lastname);
            }
            //Step 6:   Clean-up environment
            rts.close();
            stmtt.close();
            con.close();
        }
        catch(SQLException se)
        {
            //Handle errors for JDBC
            se.printStackTrace();
        }
        catch(Exception e)
        {
            //Handle errors for Class.forName
            e.printStackTrace();
        }
        Finally
        {
            //finally block used to close resources
            try
            {
                if(stmtt!=null)
                stmtt.close();
            }
            catch(SQLException se2)
            { }// nothing we can do
            try{
            if(con!=null)
            con.close();
        }
        catch(SQLException se)
        {
            se.printStackTrace();
        }
        //end finally try
        }
        //end try
        System.out.println("Goodbye!");
    }
    //end main
}
//end FirstExample
```