Assignment - 4

Java Database Connectivity (JDBC)

```java
import Java.sql.conection;
import Java.sql.driver Manager;
import Java.sql.Scanner;
import Java.sql.Statement;
import Java.sql.SQLException;
public static void main (String[] args){
    try {
        class.forName ("com.mysql.cj.jdbc.Driver");
        String url = "Jdbc.mysql.N localhost:3306/Javadb";
        String user = "root";
        String password " ";
        connection con = Driver manager.get connection
        (url, user, password) stmt = con.createStatement ()
        String createSQL = "create table Student (stu_id
                    name varchar(20), age int,
                    Major Varchar(50))";
        stmt.createUpdate (createSQL);
        System.out.println("Table created successful

        // Insert records into table
        String insertSQL = "insert into. Students
        values (01, 'Alice Brown', 20, 'computer sciance
        (02, 'Bob Smith', 22, 'mathematics'), (03, 'chal
        21, 'physics')";
```

```java
// update a student record
String updateSql = "update student SET age=23
WHERE name ='Bob smith'";
stmt.executeUpdate(updateSQL);
System.out.println("Record updated Successfully");

// Delete the student table
String deleteSql = "Delete from Student where
name = 'charlie Davis'";
stmt.executeupdate(deleteSQL);
system.out.println("Record updated Successfully");

// Display th student table
stmt.executeupdate(insertSQL);
String displaySQL = "Select * from student";
stmt.executeupdate(displaySQL);

// Alter the student table
String alterSql = "Alter Table student
modify column gpa decimal(3,2) Double";
stmt.executeupdate(alterSQL);
system.out.println("Table altered Successfully");

// modify the student Table
String modify sql = "Alter Table student
modify column gpa Decimal(3,2)";
```

```java
stmt . execute update (modify SQL);
System. out. println(" Table modified successfully");
}
    Stmt. close ();
    con. close ();  }

    catch (class not found Exception / SQLException e
        {

            e. printstack Trace ();

        }
    }
}
```