

```
/**
 * Course: CSCI 380
 */

import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.Statement;
import oracle.jdbc.OracleDriver;
import oracle.jdbc.pool.OracleDataSource;

public class oracleConnection
{
    private static ResultSet rset = null;
    private static Connection connect = null;

    public oracleConnection()
    {
        createConnection();
    }

    private static void createConnection()
    {
        if(connect == null)
        {
            try
            {
                DriverManager.registerDriver(new OracleDriver());
                String myURL = new String("jdbc:oracle:thin:@celery.cs.uwp.edu:1521:orcl");
                OracleDataSource ds = new oracle.jdbc.pool.OracleDataSource();
                ds.setURL(myURL);
                connect = ds.getConnection("chiapete", "p1142226");
            }
            catch(Exception e)
            {
                e.printStackTrace();
            }
        }
        else
        {
            return;
        }
    }

    public static Statement getStatement()
    {
        createConnection();
        try{
            return connect.createStatement();
        }catch(Exception e)
        {
            e.printStackTrace();
        }
        return null;
    }

    public static ResultSet ExecSQL(String query)
    {
        createConnection();
        System.err.println(query);
    }
}
```

```
try{
    Statement stmt = getStatement();
    return stmt.executeQuery(query);
} catch (Exception e)
{
    e.printStackTrace();
}
return null;
}
```

```
}
```

```
/**
 * Course: CSCI 380 - Files and Database
 * Project/Class Description: Connect to Oracle Using JDBC
 */

import java.util.*;
import java.sql.*;
import java.io.*;

public class oracleConnectionUsingJDBC
{
    // instance variables
    InputStreamReader stdin = new InputStreamReader(System.in);
    BufferedReader console = new BufferedReader(stdin);
    int choice = 0;
    String s1;
    int counter1 = 0;
    int counter2 = 0;
    int counter3 = 0;
    int counter4 = 0;
    int counter5 = 0;

    public void run()
    {
        while( choice != 9)
        {
            try
            {
                System.out.println("Enter a Number for the choice: ");
                System.out.println("-----");
                System.out.println("1: See All Locations Of the Bilton ");
                System.out.println("2: Query reservations by SSN ");
                System.out.println("3: Query reservations by person's name ");
                System.out.println("4: Create a new customer ");
                System.out.println("5. Query reservations by a starting reservation date ✓
");
                System.out.println("6. Cancel a reservation by reservation number ");
                System.out.println("7. Query reservations by people checked in ");
                System.out.println("8. Delete a customer by SSN ");
                System.out.println("9: Exit. ");

                System.out.println();
                System.out.print("Enter Option >>>>>> ");

                s1 = console.readLine();
                choice = Integer.parseInt(s1);
            }
            catch(IOException ioex)
            {
                System.out.println("Input error");
                System.exit(1);
            }
            catch(NumberFormatException nfex)
            {
                System.out.println("\\" +
nfex.getMessage() +
"\\" is not numeric");
                System.exit(1);
            }
        }

        switch (choice)
        {
            // Case 1
```

```
case 1:
    System.out.println( "You Chose to View All The Locations of the
BILTON HOTEL : ");
    java.sql.ResultSet rset1 = oracleConnection.ExecSQL("Select * from
hotel");

    try
    {
        while(rset1.next())
        {
            System.out.print(rset1.getString("hid"));
            System.out.print(rset1.getString("city"));
            System.out.print(rset1.getString("state"));
            System.out.println(rset1.getString("country"));
            counter1++;
        }
        System.out.println(counter1 + " rows selected. " );
    }
    catch(Exception e)
    {
        e.printStackTrace();
    }
    break;

// Case 2
case 2:
    System.out.println( "You Chose to query reservations by ssn. ");
    System.out.print("Please enter the SSN you would like to check for:
");
    Scanner scanner = new Scanner(System.in);
    int ssn = scanner.nextInt();
    java.sql.ResultSet rset2 =
        oracleConnection.ExecSQL("Select * from Room_reserve WHERE ssn =
"+ssn);
    System.out.println();
    try
    {
        while(rset2.next())
        {
            System.out.println("Starting: " + rset2.getString("from_d"));
            System.out.println("Ending: " +rset2.getString("to_d"));
            System.out.println();
            counter2++;
        }
        System.out.println(counter2 + " rows selected. " );
    }
    catch(Exception e)
    {
        e.printStackTrace();
    }
}
```

```

    }
    break;

    // Case 3
    case 3:
        System.out.println( "You Chose to query reservations by name. ");
        System.out.print("Please enter the NAME you would like to check for: ");
    ");
        Scanner scanner2 = new Scanner(System.in);
        String name = scanner2.next();
        java.sql.ResultSet rset3 =
        oracleConnection.ExecSQL("Select * from Room_reserve rr, Person p
WHERE p.ssn = rr.ssn and p.name LIKE '%" + name + "%'");
        System.out.println();
        try
        {
            while(rset3.next())
            {
                System.out.println("Starting: " + rset3.getString("from_d"));
                System.out.println("Ending: " + rset3.getString("to_d"));
                System.out.println();
                counter3++;
            }
            System.out.println(counter3 + " rows selected. ");
        }
        catch(Exception e)
        {
            e.printStackTrace();
        }
        break;

    // Case 4
    case 4:
        System.out.println( "You Chose to insert a new customer name and SSN. ");
    ");
        System.out.print("Please enter the name of the customer: ");
        Scanner scanner3 = new Scanner(System.in);
        String name2 = scanner3.next();

        System.out.print("Please enter the SSN of the customer: ");
        Scanner scanner4 = new Scanner(System.in);
        int ssn2 = scanner4.nextInt();

        java.sql.ResultSet rset4 =
        oracleConnection.ExecSQL("insert into Person values('" + ssn2 + " , "
        + name2 + " )");

```

```

        System.out.println();
    try
    {
        System.out.println("Done.");
    }
    catch(Exception e)
    {
        e.printStackTrace();
    }
    break;

    // Case 5
    case 5:
        System.out.println( "You Chose to query reservations by a starting
reservation date. ");
        System.out.println("Please enter the DATE you would like to check for
in the following format: ");
        System.out.println("FORMAT:  [DD]-[3 LETTER MONTH NAME]-[YYYY]");
        System.out.print(">>>> ");
        Scanner scanner44 = new Scanner(System.in);
        String date = scanner44.next();
        java.sql.ResultSet rset10 =
            oracleConnection.ExecSQL("select * from room_reserve rr, person p
where p.ssn = rr.ssn and rr.from_d = '"+date+"'");
        System.out.println();
        try
        {
            while(rset10.next())
            {
                System.out.println("Number: " + rset10.getString("name"));
                System.out.println("Name: " + rset10.getString("no"));
                System.out.println("Starting: " + rset10.getString("from_d"));
                System.out.println("Ending: " + rset10.getString("to_d"));
                System.out.println();
                counter4++;
            }
            System.out.println(counter4 + " rows selected. ");
        }
        catch(Exception e)
        {
            e.printStackTrace();
        }
        break;

    // Case 6
    case 6:
        System.out.println( "You Chose to delete reservations by reservation
number. ");
        System.out.print("Please enter the reservation number you would like

```

```

to cancel the reservation for: ");
Scanner scanner456 = new Scanner(System.in);
int resNo = scanner456.nextInt();
java.sql.ResultSet rset2111 =
    oracleConnection.ExecSQL("delete from Room_reserve WHERE no = "+
resNo);
System.out.println();
try
{
    System.out.println("Done. ");
}
catch(Exception e)
{
    e.printStackTrace();
}
break;

// Case 7
case 7:
    System.out.println("You Chose to query reservations by people
checked in. ");
    java.sql.ResultSet rset52 =
        oracleConnection.ExecSQL("Select * from Room_stay rs, Person p
where p.ssn = rs.ssn");
    System.out.println();
    try
    {
        while(rset52.next())
        {
            System.out.println("Name: " + rset52.getString("name"));
            System.out.println("Starting: " + rset52.getString("from_d"));
            System.out.println("Ending: "+rset52.getString("to_d"));
            System.out.println();
            counter5++;
        }
        System.out.println(counter5 + " rows selected. ");
    }
    catch(Exception e)
    {
        e.printStackTrace();
    }
    break;

// Case 8
case 8:
    System.out.println("You Chose to delete a customer by ssn. ");
    System.out.print("Please enter the SSN of the customer you would like
to delete: ");
    Scanner scanner4562 = new Scanner(System.in);

```

```

int ssn50 = scanner4562.nextInt();
java.sql.ResultSet rset21113 =
    oracleConnection.ExecSQL("delete from Person WHERE ssn = "+ssn50)↵

System.out.println();

try
{

    System.out.println("Done. " );

}
catch(Exception e)
{
    e.printStackTrace();
}

break;

/*

// Case 6

case 6:

int currentYear = Calendar.get(Calendar.YEAR);
int currentDate = Calendar.get(Calendar.DAY_OF_MONTH);
int currentMonth = Calendar.get(Calendar.MONTH);
String monthName = "";
switch(currentMonth)
{
    case 1: monthName = "Jan"; break;
    case 2: monthName = "Feb"; break;
    case 3: monthName = "Mar"; break;
    case 4: monthName = "Apr"; break;
    case 5: monthName = "May"; break;
    case 6: monthName = "Jun"; break;
    case 7: monthName = "Jul"; break;
    case 8: monthName = "Aug"; break;
    case 9: monthName = "Sep"; break;
    case 10: monthName = "Oct"; break;
    case 11: monthName = "Nov"; break;
    case 12: monthName = "Dec"; break;
}

System.out.println( "You Chose to see who is checking in today. ");

java.sql.ResultSet rset52 =
    oracleConnection.ExecSQL("select * from room_reserve rr, person p↵
where p.ssn = rr.ssn and rr.from_d = '"+currentYear+"-"+monthName+"-200"+currentDate↵
+ "'");

System.out.println();

try
{

while(rset52.next())
{
    System.out.println("Number: " + rset52.getString("name"));
    System.out.println("Name: " + rset52.getString("no"));
    System.out.println("Starting: " + rset52.getString("from_d"));
    System.out.println("Ending: "+rset52.getString("to_d"));
    System.out.println();
    counter5++;
}

System.out.println(counter5 + " rows selected. " );

```

```
        }
        catch(Exception e)
        {
            e.printStackTrace();
        }

        break;

*/

// Case 9
case 9:
    System.exit(0);

// Default Case
default :
    System.out.println(" Not a Valid Choice!");

    break;
}

}

public static void main (String args[])
{
    oracleConnectionUsingJDBC m = new oracleConnectionUsingJDBC();
    m.run();
}
}
```