

```
/**
 * Course: CSCI 380 - Files and Databases
 * Name: Matt Schlitz
 * Project 1.8: JDBC Implementation
 */
import oracle.jdbc.pool.OracleDataSource;
import oracle.jdbc.OracleDriver;
import java.sql.*;
import java.io.*;

public class oracleConnection {
    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("schlitz","uk.0h.fnu");
            }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;
    }
}
```

```

public static void main(String [] args){
    InputStreamReader stdin = new InputStreamReader(System.in);
    BufferedReader console = new BufferedReader(stdin);
    String s1;
    int choice = 0;
    java.sql.ResultSet rset1 = null;
    java.sql.ResultSet rset2 = null;
    while(choice != 6){
        try{
            System.out.println("Enter a selection ");
            System.out.println("1: How many single and double-one bedroo
ms does Bilton Houston have and how many are reserved for Feb 11, 2001?");
            System.out.println("2: Print the bill for Mr. John at Bilton
Kingsville");
            System.out.println("3: Print out the percent change in price
between Waco and Bilton on 2/5/01 and 2/19/01 respectively");
            System.out.println("4: Print out all charges and rates for t
he Bilton in Houston on 02/10/01");
            System.out.println("5: Give all reservations of Mr. Mark as
of today");
            System.out.println("6: Quit ");

            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: System.out.println("Selection 1");

                rset1 = ExecSQL("select count(*) as x from Hotel_Room h " +
                    "where (h.hid = '1' and h.cat = 'sin
gle') or (h.hid = '1' and h.cat = 'double_1')");
                rset2 = ExecSQL("select count(*) as y from Room_Reserve r,
Hotel_Room h "+
                    "where ((h.hid = '1' and h.cat = 'si
ngle') or (h.hid = '1' and h.cat = 'double_1')) " +
                    "and (r.from_d <= TO_DATE('02-11-01'
, 'MM-DD-YY') and r.to_d >= TO_DATE('02-11-01', 'MM-DD-YY')) and h.no = r.no")
                ;

                try{

```

```
        while(rset1.next()) System.out.println(rset1.getString(
"x"));
        while(rset2.next()) System.out.println(rset2.getString(
"y"));
    }
    catch(Exception e)
    {
        e.printStackTrace();
    }

    break;

    case 2: System.out.println("Selection 2");

        rset1 = ExecSQL("select s.stype, s.charge from service_to s
where s.ssn = (select p.ssn from person p " +
                    "where p.name = 'John')");

        rset2 = ExecSQL("select sum(s.charge) as total from service
_to s where s.ssn = (select p.ssn from person p " +
                    "where p.name = 'John')");

        try{
            while(rset1.next()) {
                System.out.println(rset1.getString("stype") + ": "
+ rset1.getString("charge"));
            }
            while(rset2.next()) System.out.println("Total: " + rset
2.getString("total"));
        }
        catch(Exception e)
        {
            e.printStackTrace();
        }

        break;

    case 3: System.out.println("Selection 3");

        rset1 = ExecSQL("select (r2.rate - r.rate) / r.rate * 100 a
s percent " +
                    "from Hotel_Rate r, Hotel_Rate r2, Hotel h, Hotel h2
where r.hid = h.city and h.city = 'Waco' and r2.hid = h2.city and h2.city =
'Houston' " +
                    "and r.start_date = '05-Feb-01' and r2.start_date =
'19-Feb-01' and r.cname = 'single' and r2.cname = r.cname");

        try{
            while(rset1.next()) System.out.println("Percent: " + rs
```

```
et1.getString("percent"));
    }
    catch(Exception e)
    {
        e.printStackTrace();
    }

    break;

    case 4: System.out.println("Selection 4");

        rset1 = ExecSQL("select s.charge, r.rate from Hotel h, Serv
ice_To s, Hotel_rate r where h.city = 'Houston' "+
            "and h.hid = s.hid and r.hid = h.hid and s.day = '10-Feb
-01' and (s.stype = 'telephone' or s.stype = 'restaurant' "+
            "or s.stype = 'movie' or s.stype = 'bar') and (r.cname =
'double_1' or r.cname = 'single')");

        try{
            while(rset1.next()){
                System.out.println("Charge: " + rset1.getString("ch
arge"));
                System.out.println("Rate: " + rset1.getString("rate
"));
            }
        }
        catch(Exception e)
        {
            e.printStackTrace();
        }

        break;

    case 5: System.out.println("Selection 5");

        rset1 = ExecSQL("select distinct hr.rate, r.from_d, r.to_d,
r.hid, h.city, r.ssn "+
            "from Hotel_rate hr, Room_Stay r, Hotel h, hotel_roo
m hr2 where h.hid = r.hid and r.no = hr2.no and hr2.cat = hr.cname and r.ssn
= '2222'");

        try{
            while(rset1.next()){
                System.out.println("Rate:" + rset1.getString("rate"
));
                System.out.println("From Date: " + rset1.getString(
"from_d"));
                System.out.println("To Date: " + rset1.getString("t
o_d"));
            }
        }
        catch(Exception e)
        {
            e.printStackTrace();
        }

        break;
    }
}
```

```
        System.out.println("Hotel ID: " + rset1.getString("
hid"));
        System.out.println("SSN: " + rset1.getString("ssn")
);
        System.out.println("<<--->>");
    }
}
catch(Exception e)
{
    e.printStackTrace();
}
break;

case 6:
    System.out.println("Exiting Program");
break;

default: System.out.println("Invalid Input");
break;
}
}
}
```

jdbc\_output

Enter a selection

- 1: How many single and double-one bedrooms does Bilton Houston have and how many are reserved for Feb 11, 2001?
- 2: Print the bill for Mr. John at Bilton Kingsville
- 3: Print out the percent change in price between Waco and Bilton on 2/5/01 and 2/19/01 respectively
- 4: Print out all charges and rates for the Bilton in Houston on 02/10/01
- 5: Give all reservations of Mr. Mark as of today
- 6: Quit

1  
Selection 1

12

0

Enter a selection

- 1: How many single and double-one bedrooms does Bilton Houston have and how many are reserved for Feb 11, 2001?
- 2: Print the bill for Mr. John at Bilton Kingsville
- 3: Print out the percent change in price between Waco and Bilton on 2/5/01 and 2/19/01 respectively
- 4: Print out all charges and rates for the Bilton in Houston on 02/10/01
- 5: Give all reservations of Mr. Mark as of today
- 6: Quit

2  
Selection 2

bar	: 12
movie	: 4
restaurant	: 11
telephone	: 10
restaurant	: 15
telephone	: 14
telephone	: 19
Total:	85

Enter a selection

- 1: How many single and double-one bedrooms does Bilton Houston have and how many are reserved for Feb 11, 2001?

jdbc\_output

2: Print the bill for Mr. John at Bilton Kingsville

3: Print out the percent change in price between Waco and Bilton on 2/5/01 and 2/19/01 respectively

4: Print out all charges and rates for the Bilton in Houston on 02/10/01

5: Give all reservations of Mr. Mark as of today

6: Quit

3

Selection 3

Enter a selection

1: How many single and double-one bedrooms does Bilton Houston have and how many are reserved for Feb 11, 2001?

2: Print the bill for Mr. John at Bilton Kingsville

3: Print out the percent change in price between Waco and Bilton on 2/5/01 and 2/19/01 respectively

4: Print out all charges and rates for the Bilton in Houston on 02/10/01

5: Give all reservations of Mr. Mark as of today

6: Quit

4

Selection 4

Charge: 10

Rate: 30

Charge: 10

Rate: 30

Charge: 10

Rate: 20

Charge: 10

Rate: 20

Charge: 30

Rate: 30

Charge: 30

Rate: 30

Charge: 30

Rate: 20

Charge: 30

jdbc\_output

Rate: 20  
Charge: 5  
Rate: 30  
Charge: 5  
Rate: 30  
Charge: 5  
Rate: 20  
Charge: 5  
Rate: 20  
Charge: 20  
Rate: 30  
Charge: 20  
Rate: 30  
Charge: 20  
Rate: 20  
Charge: 20  
Rate: 20  
Charge: 11  
Rate: 30  
Charge: 11  
Rate: 30  
Charge: 11  
Rate: 20  
Charge: 11  
Rate: 20  
Charge: 4  
Rate: 30  
Charge: 4  
Rate: 30  
Charge: 4  
Rate: 20  
Charge: 4

jdbc\_output

Rate: 20

Charge: 12

Rate: 30

Charge: 12

Rate: 30

Charge: 12

Rate: 20

Charge: 12

Rate: 20

Charge: 8

Rate: 30

Charge: 8

Rate: 30

Charge: 8

Rate: 20

Charge: 8

Rate: 20

Charge: 25

Rate: 30

Charge: 25

Rate: 30

Charge: 25

Rate: 20

Charge: 25

Rate: 20

Enter a selection

- 1: How many single and double-one bedrooms does Bilton Houston have and how many are reserved for Feb 11, 2001?
- 2: Print the bill for Mr. John at Bilton Kingsville
- 3: Print out the percent change in price between Waco and Bilton on 2/5/01 and 2/19/01 respectively
- 4: Print out all charges and rates for the Bilton in Houston on 02/10/01

5: Give all reservations of Mr. Mark as of today

6: Quit

5  
Selection 5

Rate:20

From Date: 2001-02-10 00:00:00.0

To Date: 2001-02-12 00:00:00.0

Hotel ID: 1

SSN: 2222

<<--->>

Rate:20

From Date: 2001-02-10 00:00:00.0

To Date: 2001-02-22 00:00:00.0

Hotel ID: 2

SSN: 2222

<<--->>

Enter a selection

1: How many single and double-one bedrooms does Bilton Houston have and how many are reserved for Feb 11, 2001?

2: Print the bill for Mr. John at Bilton Kingsville

3: Print out the percent change in price between waco and Bilton on 2/5/01 and 2/19/01 respectively

4: Print out all charges and rates for the Bilton in Houston on 02/10/01

5: Give all reservations of Mr. Mark as of today

6: Quit

6  
Exiting Program

create

```
CREATE TABLE Category(  
  cname CHAR(20) NOT NULL,  
  PRIMARY KEY (cname)  
);
```

```
CREATE TABLE Hotel(  
  hid CHAR(10) NOT NULL,  
  city CHAR(10),  
  state CHAR(10),  
  country CHAR(10),  
  PRIMARY KEY (hid)  
);
```

```
CREATE TABLE Hotel_Rate (  
  hid CHAR(10) NOT NULL,  
  cname CHAR(20) NOT NULL,  
  start_date DATE NOT NULL,  
  end_date DATE NOT NULL,  
  rate float,  
  PRIMARY KEY (hid, cname, start_date, end_date),  
  FOREIGN KEY (hid) REFERENCES Hotel (hid)  
    ON DELETE CASCADE ,  
  FOREIGN KEY (cname) REFERENCES Category (cname)  
    ON DELETE CASCADE,  
  CHECK ( ( rate <= 200 ) OR cname NOT IN ('single', 'double_1', 'double_2',  
'suite', 'conf_room'))  
);
```

```
CREATE TABLE Hotel_Room (  
  hid CHAR(10) NOT NULL,  
  no CHAR(10) NOT NULL,  
  cat CHAR(20),  
  PRIMARY KEY( hid, no ),  
  FOREIGN KEY( hid ) REFERENCES Hotel (hid)  
    ON DELETE CASCADE,  
  FOREIGN KEY( cat ) REFERENCES Category (cname)  
    ON DELETE CASCADE  
);
```

```
CREATE TABLE Person (  
  ssn CHAR(10) NOT NULL,  
  name CHAR(20),  
  PRIMARY KEY( ssn )  
);
```

```
CREATE TABLE Room_Stay (  
  hid CHAR(10) NOT NULL,  
  no CHAR(10) NOT NULL,  
  ssn CHAR(10) not null,  
  from_d DATE NOT NULL,  
  to_d DATE,  
  PRIMARY KEY( hid, no, ssn, from_d ),  
  FOREIGN KEY( hid, no ) REFERENCES Hotel_Room (hid, no)  
    ON DELETE CASCADE,
```

```

                                create
FOREIGN KEY( ssn ) REFERENCES Person (ssn)
ON DELETE CASCADE
);

```

```

CREATE TABLE Room_Reserve (
  hid CHAR(10) NOT NULL,
  no CHAR(10) NOT NULL,
  ssn CHAR(10) not null,
  from_d DATE NOT NULL,
  to_d DATE,
  res_d DATE,
  PRIMARY KEY( hid, no, ssn, from_d ),
  FOREIGN KEY( hid, no ) REFERENCES Hotel_Room (hid, no)
  ON DELETE CASCADE,
  FOREIGN KEY( ssn ) REFERENCES Person (ssn)
  ON DELETE CASCADE,
  check(from_d <= to_d and res_d <= from_d)
);

```

```

CREATE TABLE Service_To (
  ssn CHAR(10) NOT NULL,
  hid CHAR(10) NOT NULL,
  stype CHAR(20) NOT NULL,
  day DATE NOT NULL,
  charge float,
  PRIMARY KEY ( ssn, hid, day, stype ),
  FOREIGN KEY ( hid ) REFERENCES Hotel (hid)
  ON DELETE CASCADE,
  FOREIGN KEY ( ssn ) REFERENCES Person (ssn)
  ON DELETE CASCADE
);

```

```

Create table res_next_20days(
  hid CHAR(10),
  day DATE,
  num_res number
);

```

drop

```
drop table Service_To;  
drop table Room_Reserve;  
drop table Room_Stay;  
drop table Person;  
drop table Hotel_Room;  
drop table Hotel_Rate;  
drop table Hotel;  
drop table Category;  
drop table res_next_20days;
```

```
ins_category
insert into Category values( 'single');
insert into Category values( 'double_1');
insert into Category values( 'double_2');
insert into Category values( 'suite');
insert into Category values( 'conf_room');
```

```

                                ins_hotel
insert into Hotel values( '1', 'Houston', 'TX', 'USA' );
insert into Hotel values( '2', 'Kingsville', 'TX', 'USA' );
insert into Hotel values( '3', 'Corpos', 'TX', 'USA' );
insert into Hotel values( '4', 'Victoria', 'TX', 'USA' );
insert into Hotel values( '5', 'Yazhou', 'Jiangsu', 'China' );
insert into Hotel values( '6', 'Beijing', 'Beijing', 'China' );
insert into Hotel values( '7', 'Tianjin', 'Tianjin', 'China' );
insert into Hotel values( '8', 'Naijin', 'Jiangsu', 'China' );
insert into Hotel values( '9', 'Dallas', 'TX', 'USA' );
insert into Hotel values( '10', 'Waco', 'Washington', 'USA' );
insert into Hotel values( '11', 'Paris', 'Paris', 'France' );
insert into Hotel values( '12', 'jilin', 'Liaollin', 'China' );
```

```

                                ins_hotelRate
insert into Hotel_Rate values( '1', 'single',
TO_DATE('02-01-01','MM-DD-YY'), TO_DATE('02-15-01','MM-DD-YY'), 20.0);
insert into Hotel_Rate values( '1', 'double_1',
TO_DATE('02-01-01','MM-DD-YY'), TO_DATE('02-15-01','MM-DD-YY'), 30.0);
insert into Hotel_Rate values( '1', 'conf_room',
TO_DATE('02-01-01','MM-DD-YY'), TO_DATE('02-15-01','MM-DD-YY'), 5.0);
insert into Hotel_Rate values( '1', 'double_2',
TO_DATE('02-01-01','MM-DD-YY'), TO_DATE('02-15-01','MM-DD-YY'), 21.0);
insert into Hotel_Rate values( '1', 'suite',
TO_DATE('02-01-01','MM-DD-YY'), TO_DATE('02-15-01','MM-DD-YY'), 31.0);
insert into Hotel_Rate values( '1', 'single',
TO_DATE('02-16-01','MM-DD-YY'), TO_DATE('02-25-01','MM-DD-YY'), 20.0);
insert into Hotel_Rate values( '1', 'double_1',
TO_DATE('02-16-01','MM-DD-YY'), TO_DATE('02-25-01','MM-DD-YY'), 30.0);
insert into Hotel_Rate values( '1', 'conf_room',
TO_DATE('02-16-01','MM-DD-YY'), TO_DATE('02-25-01','MM-DD-YY'), 5.0);
insert into Hotel_Rate values( '1', 'double_2',
TO_DATE('02-16-01','MM-DD-YY'), TO_DATE('02-25-01','MM-DD-YY'), 21.0);
insert into Hotel_Rate values( '1', 'suite',
TO_DATE('02-16-01','MM-DD-YY'), TO_DATE('02-25-01','MM-DD-YY'), 31.0);

```

```
insert into Person values( '1111', 'John');
insert into Person values( '2222', 'Mark');
insert into Person values( '3333', 'Jake');
insert into Person values( '4444', 'Steven');
insert into Person values( '5555', 'Tom');
insert into Person values( '6666', 'Paris');
insert into Person values( '7777', 'Johnson');
insert into Person values( '8888', 'hunan');
insert into Person values( '9999', 'huang');
insert into Person values( '1122', 'Tu');
insert into Person values( '1133', 'Jiang');
insert into Person values( '1144', 'Lin');
```

ins\_reserve

```
insert into Room_Reserve values( '1', '100', '1111',  
TO_DATE('03-10-01', 'MM-DD-YY'), TO_DATE('03-12-01', 'MM-DD-YY'),  
TO_DATE('01-16-01', 'MM-DD-YY'));
```

```
insert into Room_Reserve values( '1', '101', '1111',  
TO_DATE('03-10-01', 'MM-DD-YY'), TO_DATE('03-12-01', 'MM-DD-YY'),  
TO_DATE('01-10-01', 'MM-DD-YY'));
```

```
insert into Room_Reserve values( '1', '102', '1111',  
TO_DATE('03-10-01', 'MM-DD-YY'), TO_DATE('03-12-01', 'MM-DD-YY'),  
TO_DATE('01-13-01', 'MM-DD-YY'));
```

```
insert into Room_Reserve values( '1', '200', '2222',  
TO_DATE('03-10-01', 'MM-DD-YY'), TO_DATE('03-12-01', 'MM-DD-YY'),  
TO_DATE('01-12-01', 'MM-DD-YY'));
```

```
insert into Room_Reserve values( '1', '300', '3333',  
TO_DATE('03-10-01', 'MM-DD-YY'), TO_DATE('03-12-01', 'MM-DD-YY'),  
TO_DATE('01-18-01', 'MM-DD-YY'));
```

```
insert into Room_Reserve values( '1', '400', '4444',  
TO_DATE('03-10-01', 'MM-DD-YY'), TO_DATE('03-12-01', 'MM-DD-YY'),  
TO_DATE('01-20-01', 'MM-DD-YY'));
```

```
insert into Room_Reserve values( '1', '500', '5555',  
TO_DATE('03-10-01', 'MM-DD-YY'), TO_DATE('03-12-01', 'MM-DD-YY'),  
TO_DATE('01-23-01', 'MM-DD-YY'));
```

```
insert into Room_Reserve values( '1', '600', '6666',  
TO_DATE('03-10-01', 'MM-DD-YY'), TO_DATE('03-12-01', 'MM-DD-YY'),  
TO_DATE('01-11-01', 'MM-DD-YY'));
```

```
insert into Room_Reserve values( '2', '100', '1111',  
TO_DATE('03-10-01', 'MM-DD-YY'), TO_DATE('03-22-01', 'MM-DD-YY'),  
TO_DATE('01-09-01', 'MM-DD-YY'));
```

```
insert into Room_Reserve values( '2', '200', '2222',  
TO_DATE('03-10-01', 'MM-DD-YY'), TO_DATE('03-22-01', 'MM-DD-YY'),  
TO_DATE('01-14-01', 'MM-DD-YY'));
```

```
insert into Room_Reserve values( '2', '300', '3333',  
TO_DATE('03-10-01', 'MM-DD-YY'), TO_DATE('03-22-01', 'MM-DD-YY'),  
TO_DATE('01-14-01', 'MM-DD-YY'));
```

```
insert into Room_Reserve values( '2', '400', '4444',  
TO_DATE('03-10-01', 'MM-DD-YY'), TO_DATE('03-25-01', 'MM-DD-YY'),  
TO_DATE('01-26-01', 'MM-DD-YY'));
```

```
insert into Room_Reserve values( '2', '500', '5555',  
TO_DATE('03-10-01', 'MM-DD-YY'), TO_DATE('03-25-01', 'MM-DD-YY'),  
TO_DATE('01-16-01', 'MM-DD-YY'));
```

```
insert into Room_Reserve values( '2', '600', '6666',  
TO_DATE('03-10-01', 'MM-DD-YY'), TO_DATE('03-25-01', 'MM-DD-YY'),  
TO_DATE('01-15-01', 'MM-DD-YY'));
```

```
insert into Room_Reserve values( '2', '400', '2222',  
TO_DATE('04-10-01', 'MM-DD-YY'), TO_DATE('04-25-01', 'MM-DD-YY'),  
TO_DATE('02-05-01', 'MM-DD-YY'));
```

```
insert into Room_Reserve values( '1', '300', '2222',  
TO_DATE('04-01-01', 'MM-DD-YY'), TO_DATE('03-09-01', 'MM-DD-YY'),  
TO_DATE('02-05-01', 'MM-DD-YY'));
```

ins\_reserve

```
insert into Room_Reserve values( '2', '600', '2222',  
TO_DATE('04-29-01','MM-DD-YY'),TO_DATE('05-11-01','MM-DD-YY'),  
TO_DATE('01-12-01','MM-DD-YY'));
```

```
insert into Room_Reserve values( '1', '900', '1133',  
TO_DATE('03-11-01','MM-DD-YY'),TO_DATE('03-15-01','MM-DD-YY'),  
TO_DATE('01-15-01','MM-DD-YY'));
```

```
insert into Room_Reserve values( '1', '700', '1144',  
TO_DATE('03-10-01','MM-DD-YY'),TO_DATE('03-21-01','MM-DD-YY'),  
TO_DATE('01-31-01','MM-DD-YY'));
```

```
insert into Room_Reserve values( '1', '800', '7777',  
TO_DATE('03-14-01','MM-DD-YY'),TO_DATE('03-19-01','MM-DD-YY'),  
TO_DATE('01-29-01','MM-DD-YY'));
```

```
insert into Hotel_Room values( '1', '100', 'single');
insert into Hotel_Room values( '1', '200', 'single');
insert into Hotel_Room values( '1', '300', 'single');
insert into Hotel_Room values( '1', '400', 'double_1');
insert into Hotel_Room values( '1', '500', 'double_1');
insert into Hotel_Room values( '1', '600', 'double_1');
insert into Hotel_Room values( '1', '700', 'single');
insert into Hotel_Room values( '1', '800', 'single');
insert into Hotel_Room values( '1', '900', 'single');
insert into Hotel_Room values( '1', '101', 'double_1');
insert into Hotel_Room values( '1', '102', 'double_1');
insert into Hotel_Room values( '1', '103', 'double_1');
insert into Hotel_Room values( '2', '100', 'single');
insert into Hotel_Room values( '2', '200', 'single');
insert into Hotel_Room values( '2', '300', 'single');
insert into Hotel_Room values( '2', '400', 'double_1');
insert into Hotel_Room values( '2', '500', 'double_1');
insert into Hotel_Room values( '2', '600', 'double_1');
insert into Hotel_Room values( '3', '100', 'single');
insert into Hotel_Room values( '3', '200', 'single');
insert into Hotel_Room values( '3', '300', 'single');
insert into Hotel_Room values( '3', '400', 'double_1');
insert into Hotel_Room values( '3', '500', 'double_1');
insert into Hotel_Room values( '3', '600', 'double_1');
insert into Hotel_Room values( '4', '100', 'single');
insert into Hotel_Room values( '4', '200', 'single');
insert into Hotel_Room values( '4', '300', 'single');
insert into Hotel_Room values( '4', '400', 'double_1');
insert into Hotel_Room values( '4', '500', 'double_1');
insert into Hotel_Room values( '4', '600', 'double_1');
insert into Hotel_Room values( '5', '100', 'single');
insert into Hotel_Room values( '5', '200', 'single');
```

ins\_room

```
insert into Hotel_Room values( '5', '300', 'single');  
insert into Hotel_Room values( '5', '400', 'double_1');  
insert into Hotel_Room values( '5', '500', 'double_1');  
insert into Hotel_Room values( '5', '600', 'double_1');  
insert into Hotel_Room values( '6', '100', 'single');  
insert into Hotel_Room values( '6', '200', 'single');  
insert into Hotel_Room values( '6', '300', 'single');  
insert into Hotel_Room values( '6', '400', 'double_1');  
insert into Hotel_Room values( '6', '500', 'double_1');  
insert into Hotel_Room values( '6', '600', 'double_1');
```

```

                                ins_service
insert into Service_To values( '1111', '1', 'telephone',
TO_DATE('02-10-01','MM-DD-YY'), 10.0);

insert into Service_To values( '2222', '1', 'restaurant',
TO_DATE('02-10-01','MM-DD-YY'), 30.0);

insert into Service_To values( '3333', '1', 'movie',
TO_DATE('02-10-01','MM-DD-YY'), 5.0);

insert into Service_To values( '4444', '1', 'bar',
TO_DATE('02-10-01','MM-DD-YY'), 20.0);

insert into Service_To values( '1111', '1', 'restaurant',
TO_DATE('02-10-01','MM-DD-YY'), 11.0);

insert into Service_To values( '1111', '1', 'movie',
TO_DATE('02-10-01','MM-DD-YY'), 4.0);

insert into Service_To values( '1111', '1', 'bar',
TO_DATE('02-10-01','MM-DD-YY'), 12.0);

insert into Service_To values( '1111', '1', 'telephone',
TO_DATE('02-11-01','MM-DD-YY'), 14.0);

insert into Service_To values( '1111', '1', 'restaurant',
TO_DATE('02-11-01','MM-DD-YY'), 15.0);

insert into Service_To values( '5555', '1', 'telephone',
TO_DATE('02-10-01','MM-DD-YY'), 8.0);

insert into Service_To values( '6666', '1', 'restaurant',
TO_DATE('02-10-01','MM-DD-YY'), 25.0);

insert into Service_To values( '1111', '2', 'telephone',
TO_DATE('02-10-01','MM-DD-YY'), 19.0);

insert into Service_To values( '2222', '2', 'telephone',
TO_DATE('02-10-01','MM-DD-YY'), 27.0);

insert into Service_To values( '3333', '2', 'restaurant',
TO_DATE('02-10-01','MM-DD-YY'), 24.0);

insert into Service_To values( '4444', '2', 'restaurant',
TO_DATE('02-10-01','MM-DD-YY'), 37.0);

insert into Service_To values( '5555', '2', 'restaurant',
TO_DATE('02-10-01','MM-DD-YY'), 100.0);

insert into Service_To values( '6666', '2', 'movie',
TO_DATE('02-10-01','MM-DD-YY'), 5.5);

```

```

                                ins_stay
insert into Room_Stay values( '1', '100', '1111',
TO_DATE('02-10-01', 'MM-DD-YY'),TO_DATE('02-12-01', 'MM-DD-YY'));

insert into Room_Stay values( '1', '101', '1111',
TO_DATE('02-10-01', 'MM-DD-YY'),TO_DATE('02-12-01', 'MM-DD-YY'));

insert into Room_Stay values( '1', '102', '1111',
TO_DATE('02-10-01', 'MM-DD-YY'),TO_DATE('03-12-01', 'MM-DD-YY'));

insert into Room_Stay values( '1', '200', '2222',
TO_DATE('02-10-01', 'MM-DD-YY'),TO_DATE('02-12-01', 'MM-DD-YY'));

insert into Room_Stay values( '1', '300', '3333',
TO_DATE('02-10-01', 'MM-DD-YY'),TO_DATE('02-12-01', 'MM-DD-YY'));

insert into Room_Stay values( '1', '400', '4444',
TO_DATE('02-10-01', 'MM-DD-YY'),TO_DATE('02-12-01', 'MM-DD-YY'));

insert into Room_Stay values( '1', '500', '5555',
TO_DATE('02-10-01', 'MM-DD-YY'),TO_DATE('02-12-01', 'MM-DD-YY'));

insert into Room_Stay values( '1', '600', '6666',
TO_DATE('02-10-01', 'MM-DD-YY'),TO_DATE('02-12-01', 'MM-DD-YY'));

insert into Room_Stay values( '2', '100', '1111',
TO_DATE('02-10-01', 'MM-DD-YY'),TO_DATE('02-22-01', 'MM-DD-YY'));

insert into Room_Stay values( '2', '200', '2222',
TO_DATE('02-10-01', 'MM-DD-YY'),TO_DATE('02-22-01', 'MM-DD-YY'));

insert into Room_Stay values( '2', '300', '3333',
TO_DATE('02-10-01', 'MM-DD-YY'),TO_DATE('02-22-01', 'MM-DD-YY'));

insert into Room_Stay values( '2', '400', '4444',
TO_DATE('02-10-01', 'MM-DD-YY'),TO_DATE('02-25-01', 'MM-DD-YY'));

insert into Room_Stay values( '2', '500', '5555',
TO_DATE('02-10-01', 'MM-DD-YY'),TO_DATE('02-25-01', 'MM-DD-YY'));

insert into Room_Stay values( '2', '600', '6666',
TO_DATE('02-10-01', 'MM-DD-YY'),TO_DATE('02-25-01', 'MM-DD-YY'));

```