**import** java.text.ParseException;

**import** java.text.SimpleDateFormat;

**import** java.util.ArrayList;

**import** java.util.Date;

**import** java.util.List;

**import** java.util.Scanner;

**public** **class** HotelCasereq4 {

**public** **static** **void** main(String[] args) **throws** NumberFormatException, ParseException {

List<Room>\_roomList=**new** ArrayList<Room>();

RoomBO rbo=**new** RoomBO();

Scanner input=**new** Scanner(System.***in***);

SimpleDateFormat df=**new** SimpleDateFormat("dd-MM-yyyy HH:mm:ss");

System.***out***.println("Enter the number of rooms");

**int** no;

no=Integer.*parseInt*(input.nextLine());

**for**(**int** i=0;i<no;i++)

{

String detail;

detail=input.nextLine();

Room room=**new** Room(Integer.*parseInt*(detail.split(",")[0]),Integer.*parseInt*(detail.split(",")[1]),

detail.split(",")[2],Integer.*parseInt*(detail.split(",")[3]),df.parse(detail.split(",")[4])

,Double.*parseDouble*(detail.split(",")[5]));

\_roomList.add(room);

}

System.***out***.println("Enter the search type\n1.By Type\n2.By Price");

**int** choice;

choice=Integer.*parseInt*(input.nextLine());

**while**(choice>0)

{

**if**(choice==1)

{

System.***out***.println("Enter the type");

String type;

type=input.nextLine();

List<Room>list3=rbo.FindRoom(\_roomList, type);

**for** (Room room : list3) {

System.***out***.println("Number\tFloor\tType\tCapacity\tBooked Time\tPrice");

System.***out***.println(room.get\_number()+"\t"+room.get\_floor()+"\t"+room.get\_type()+"\t"+room.get\_capacity()

+"\t"+df.format(room.get\_bookedTime())+"\t"+room.get\_price());

}

}

**if**(choice==2)

{

System.***out***.println("Enter the Price");

**double** price;

price=Double.*parseDouble*(input.nextLine());

List<Room>list4=rbo.FindRoom(\_roomList, price);

**for** (Room room : list4) {

System.***out***.println("Number\tFloor\tType\tCapacity\tBooked Time\tPrice");

System.***out***.println(room.get\_number()+"\t"+room.get\_floor()+"\t"+room.get\_type()+"\t"+room.get\_capacity()

+"\t"+df.format(room.get\_bookedTime())+"\t"+room.get\_price());

}

}

**else**

{

System.***out***.println("InValid Choice");

}

System.***out***.println("Enter the search type\n1.By Type\n2.By Price");

choice=Integer.*parseInt*(input.nextLine());

}

}

}

**class** Room

{

**private** **int** \_number;

**private** **int** \_floor;

**private** String \_type;

**private** **int** \_capacity;

**private** Date \_bookedTime;

**private** **double** \_price;

**public** **int** get\_number() {

**return** \_number;

}

**public** **void** set\_number(**int** \_number) {

**this**.\_number = \_number;

}

**public** **int** get\_floor() {

**return** \_floor;

}

**public** **void** set\_floor(**int** \_floor) {

**this**.\_floor = \_floor;

}

**public** String get\_type() {

**return** \_type;

}

**public** **void** set\_type(String \_type) {

**this**.\_type = \_type;

}

**public** **int** get\_capacity() {

**return** \_capacity;

}

**public** **void** set\_capacity(**int** \_capacity) {

**this**.\_capacity = \_capacity;

}

**public** Date get\_bookedTime() {

**return** \_bookedTime;

}

**public** **void** set\_bookedTime(Date \_bookedTime) {

**this**.\_bookedTime = \_bookedTime;

}

**public** **double** get\_price() {

**return** \_price;

}

**public** **void** set\_price(**double** \_price) {

**this**.\_price = \_price;

}

**public** Room(**int** \_number, **int** \_floor, String \_type, **int** \_capacity, Date \_bookedTime, **double** \_price) {

**this**.\_number = \_number;

**this**.\_floor = \_floor;

**this**.\_type = \_type;

**this**.\_capacity = \_capacity;

**this**.\_bookedTime = \_bookedTime;

**this**.\_price = \_price;

}

**public** Room() {

}

@Override

**public** String toString() {

SimpleDateFormat df=**new** SimpleDateFormat("dd-MM-yyyy HH:mm:ss");

**return** "Number:" + \_number +"\n"+ "Floor:" + \_floor +"\n"+ "Type:" + \_type +"\n"+ "Capacity:" + \_capacity+"\n"

+"BookedTime:" + df.format(\_bookedTime) +"\n"+ "Price:" + \_price+"\n";

}

}

**class** RoomBO

{

**public** List<Room> FindRoom(List<Room>\_roomList,String type)

{

List<Room>list1=**new** ArrayList<Room>();

**for** (Room room :\_roomList ) {

**if**(room.get\_type().equals(type))

{

list1.add(room);

}

}

**return** list1;

}

**public** List<Room> FindRoom(List<Room>\_roomList,**double** price)

{

List<Room>list2=**new** ArrayList<Room>();

**for** (Room room : \_roomList) {

**if**(room.get\_price()==price)

{

list2.add(room);

}

}

**return** list2;

}

}