**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** Hotel {

/\*\*

\* **@param** args

\* **@throws** Exception

\*/

**public** **static** **void** main(String[] args) **throws** Exception {

// **TODO** Auto-generated method stub

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

ArrayList<Room> rooms=**new** ArrayList<Room>();

//System.out.println("enter room1 details ");

**int** no;

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

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

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

{

Room r1=**new** Room();

String str=input.nextLine();

String arr[]=str.split(",");

r1.set\_number(Integer.*parseInt*(arr[0]));

r1.set\_floor(Integer.*parseInt*(arr[1]));

r1.set\_type(arr[2]);

r1.set\_capacity(Integer.*parseInt*(arr[3]));

r1.set\_bookedTime(df.parse(arr[4]));

r1.set\_price(Double.*parseDouble*(arr[5]));

rooms.add(r1);

}

System.*out*.println("\nenter checkout date");

Date checkoutTime=df.parse(input.nextLine());

List<Room>newRoomlist=Room.*CheckoutRooms*(rooms, checkoutTime);

**if**(newRoomlist.isEmpty())

{

System.*out*.println("No rooms to checkout");

}

**else**

{

System.*out*.println();

System.*out*.println("Rooms to be checkedout");

System.*out*.printf("%-7s%-7s%-20s%-10s%-20s%-10s","Number","Float","Type","Capacity","BookedTime","Price");

System.*out*.println();

**for** (Room temp : newRoomlist) {

System.*out*.println(temp);

}

}

}

}

**class** Room

{

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

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

**private** String \_type;

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

**private** Date \_bookedTime;

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

Room(){}

**public** Room(**int** \_number, **int** \_floor, String \_type, **int** \_capacity,

Date \_bookedTime, **double** \_price) {

**super**();

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

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

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

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

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

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

}

@Override

**public** String toString() {

DecimalFormat def=**new** DecimalFormat(".#");

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

**return** String.*format*("%-7s%-7s%-20s%-10s%-20s%-10s", **this**.get\_number(),**this**.get\_floor(),

**this**.get\_type(),**this**.get\_capacity(),df.format(get\_bookedTime()),def.format(\_price));

}

**public** **static** List<Room> CheckoutRooms(ArrayList<Room>rooms,Date checkoutTime)

{

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

**for**(**int** i=0;i<rooms.size();i++)

{

**if**(checkoutTime.~~getHours~~()-rooms.get(i).get\_bookedTime().~~getHours~~()>=1)

{

newRoom.add(rooms.get(i));

}

}

**return** newRoom;

}

}