

KL UNIVERSITY
FRESHMAN ENGINEERING DEPARTMENT
A Project Based Lab Report
On
HOTEL MANAGEMENT SYSTEM

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UNDER THE ESTEEMED GUIDANCE OF
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CERTIFICATE

This is to certify that the project based laboratory report entitled “HOTEL MANAGEMENT SYSTEM” submitted by Ms. THONDEPU SAI MRUDHULA bearing Regd. No. 2000031007 to the **Department of Basic Engineering Sciences, KL University** in partial fulfillment of the requirements for the completion of a project based Laboratory in “COMPUTATIONAL THINKING FOR DESIGN ” course in I B Tech I Semester, is a bonafide record of the work carried out by him/her under my supervision during the academic year 2020 – 2021.

PROJECT SUPERVISOR

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ABSTRACT

My project title is hotel management system. In this project I used structures to pointers and functions. I used the concepts regarding hotel management.

The concepts used by me are availability, features of room, room allocation, the details of customer, room deallocation, restaurant, and billing. I used the concepts in my project I used switch case and structures and functions I used pointers for structures.

In this project the question is about to construct a application of hotel management system. We need to use the structures to pointers and function so I used the structure pointers. In structure I defined the inputs and used the structure variable as pointer

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INTRODUCTION

Project is about hotel management system this project

QUESTION:

HOTEL MANAGEMENT SYSTEM

Develop an application for hotel management system with the following modules using structures, pointers to structure variables, passing structure pointers to function.

1. Get availability
2. Features of room
3. Room allocation
4. Show customer details
5. Room deallocation
6. Restaurant
7. Billing.

Make your own assumptions for this project, design and implement hotel management system.

AIM: To create a simple c program on the hotel management system using structure pointer and functions

Advantages:- THIS PROJECT IS USEFUL TO THE HOTELS TO GET THE DETAILS OF THE PERSON STAYED IN THE HOTEL

Disadvantages:-The disadvantages are like we can do this project without using only structure to pointers we can do it without using structures to pointer.

Future enhancements:-we can even do this project using other languages like c++ ,java, in future it may help full to me. This project will help in solving the tough problems of structures

SYSTEM REQUIREMENTS

➤ SOFTWARE REQUIREMENTS:

The major software requirements of the project are as follows:

Language : C language

Operating system: Windows 10.

➤ HARDWARE REQUIREMENTS:

The hardware requirements that map towards the software are as follows:

RAM :flip-flops

Processor : Dev c++

ALGORITHM

Algorithm for hotel management system

Step 1: start

Step 2: Ask for the values.

Step 3: Take the values.

Step 4:

Select a option from the below

1.availability

2.features of room

3.room allocation

4.show customer details

5.room deallocation

6.restaurant

7.billing

If u select the 1st option then its shows what are the available rooms in the hotel like

Room	Room type	availability
101	Delux	available
102	a/c room	available
103	Non a/c	available
104	general	available

If u select the 2nd option it shows that features of the room like

1.sp.delux

2.delux

3.general

4.couple

Again choose a option from the above

If you select

1.Features of sp.delux

a/c

t.v

cost:1000per/day

2.Features of delux

a/c

no t.v

cost:5000per/day

3.Features of general

non a/c\n

no t.v

cost:2000per/day

4.Features of couple

a/c

t.v

extra beds

cost:20000\nper/day

if not the program stops

again it ask to choose an option from above

if u choose 3 room allocation it asks you the details of you

asks the name

asks the room number

asks the month you entered into hotel

asks the date you entered into hotel

asks the year you entered

asks nationality

asks phone number

again it ask to choose an option from above

if you choose 4 it asks to show the customer details

prints the name and nationality

prints the room number and month, year, date

prints the phone number

again it ask to choose an option from above

if you choose 5 room deallocation

it asks your room number

date, month, year you want to leave hotel

then your room is deallocated and available to book for others

again it ask to choose an option from above

if you choose 6 restaurant

1.blackforest

2.vanilla

3.chocolate

4.butter scotch

5.richcoffee

Its asks you to choose one from the above

If you choose

1 blackforest 95

2 vanilla 30

3 chocolate 50

4 butterscotch 50

5 richcoffee 50

again it ask to choose an option from above

if you choose 7 billing

it asks what u have taken

then it asks you to pay

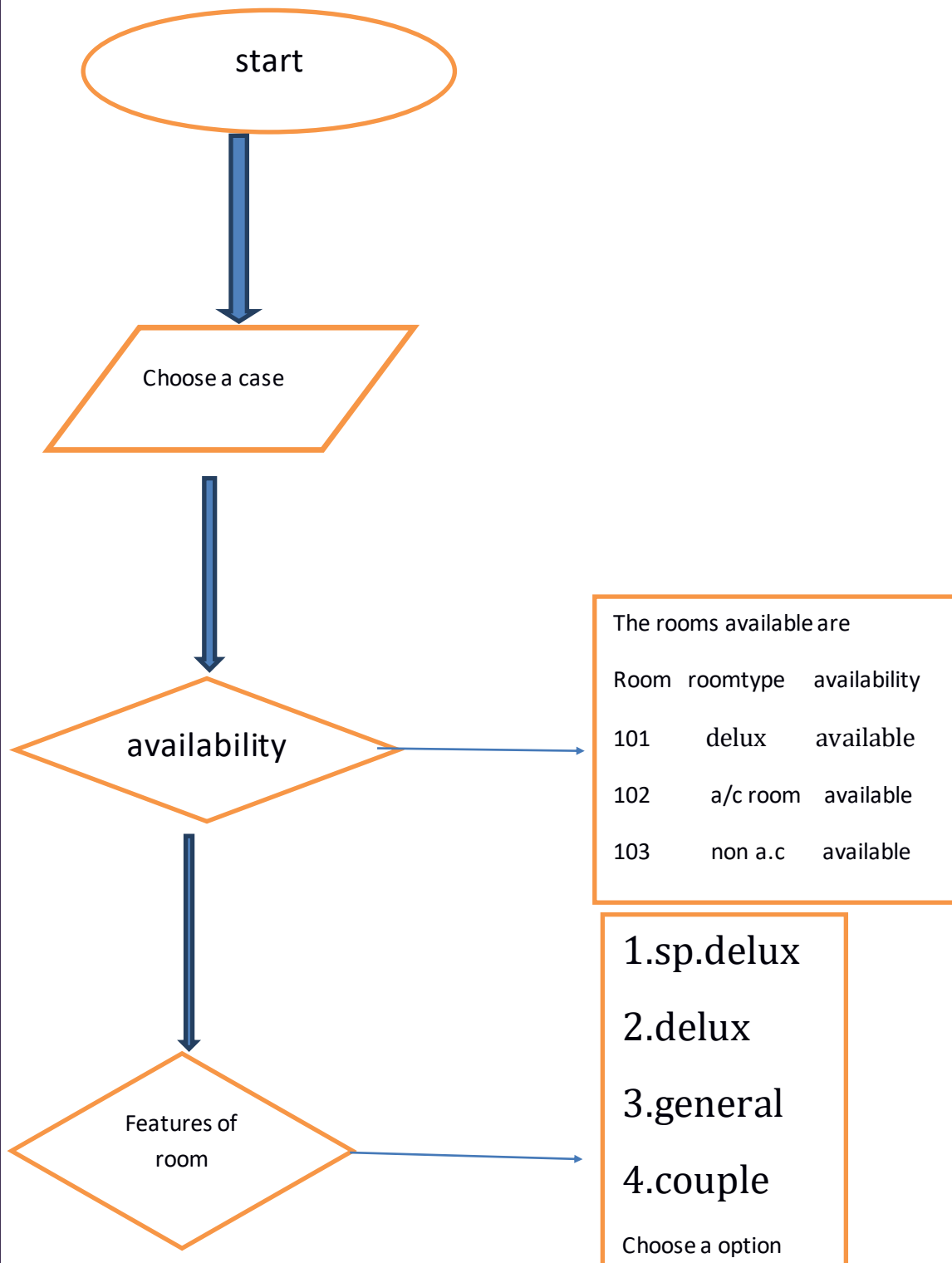
he gives the bill

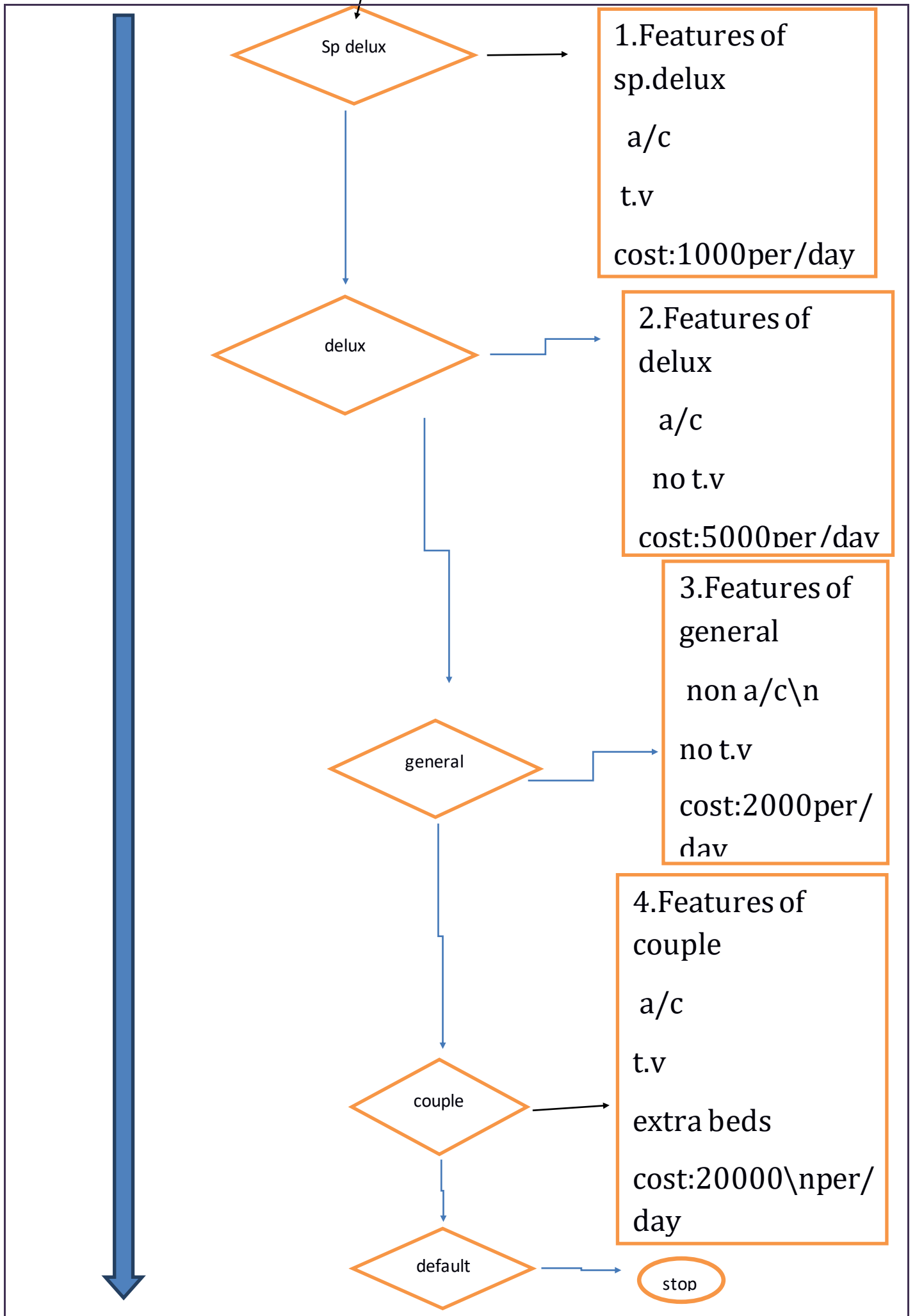
thanks for choosing our hotel 😊

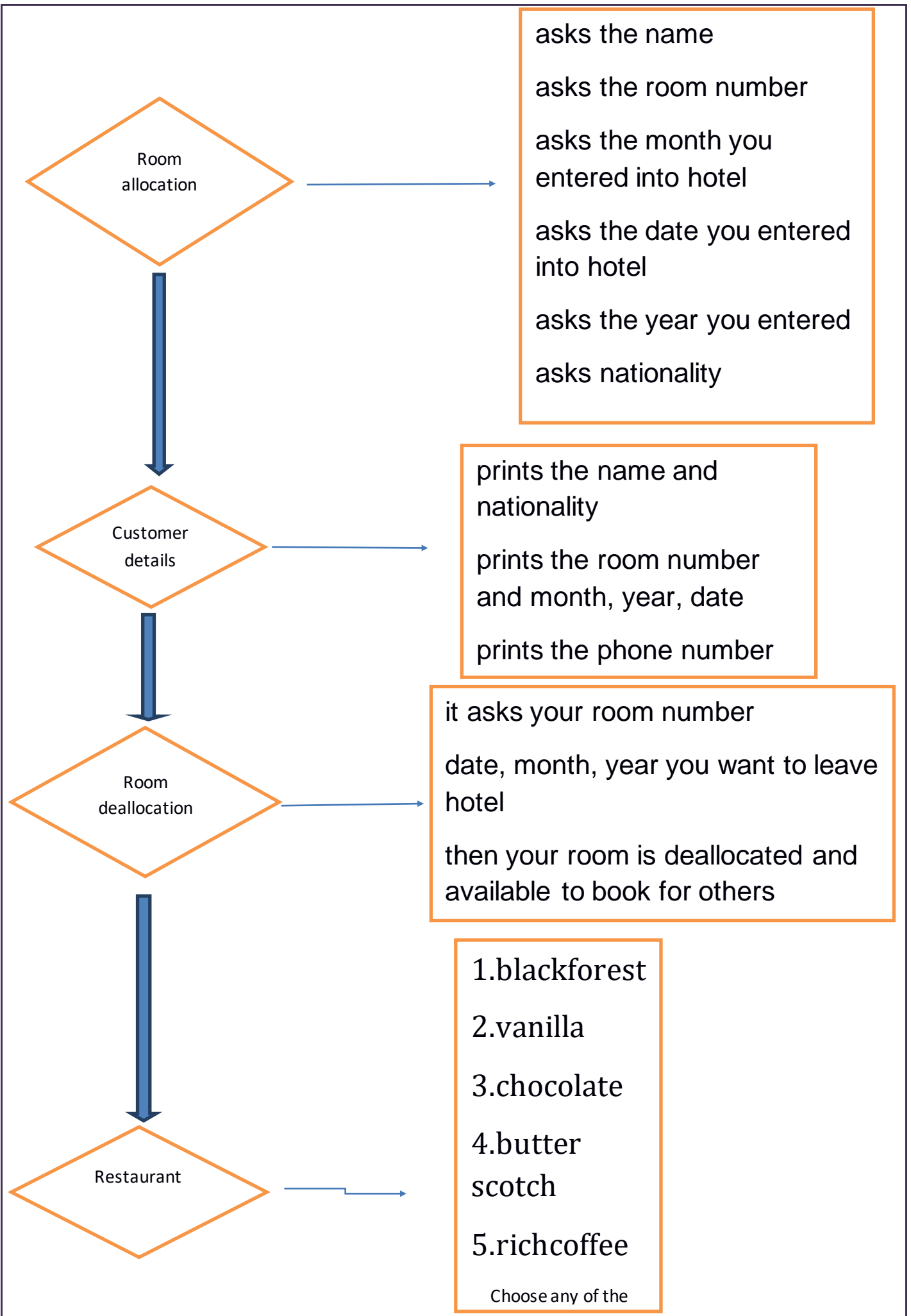
Step 5:if u choose any other options the program ends

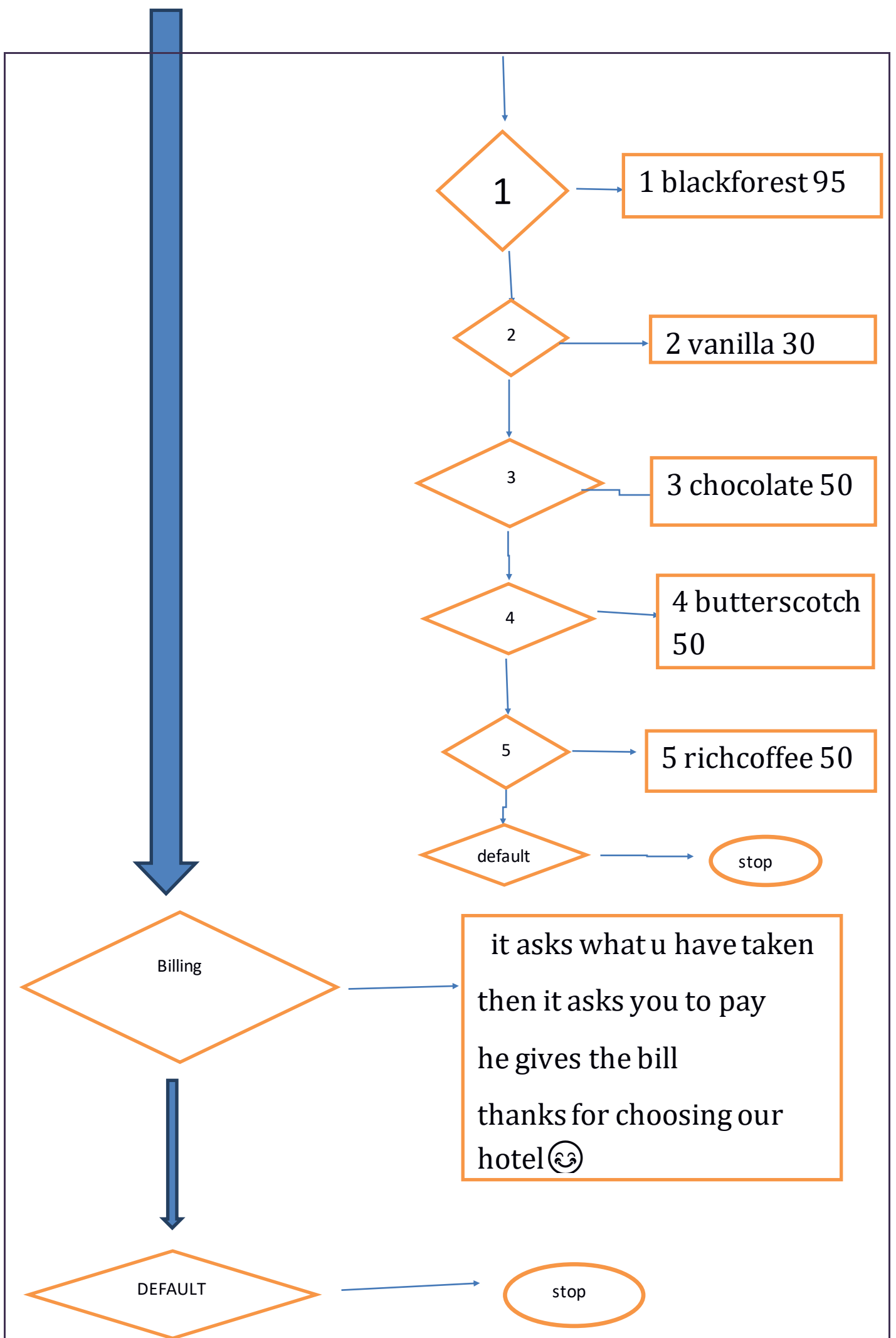
DATA FLOW DIAGRAM

Flow chart









IMPLEMENTATION

Code:

```
#include<stdio.h>
#include<stdlib.h>
#include<string.h>
void get_availability();
void Features_of_room();
void Room_allocation();
void Show_customer_details();
void Room_deallocation();
void Restaurant();
void Billing();
struct hotel
{
    int roomnumber;
    char name[200];
    int phonenumber[20];
    char nationality[15];
    int yearin;
    int monthin;
    int datein;
    int outyear;
```

```
    int outmonth;

    int outdate;

    int rent;
}*a;
int main()
{
    int ch;
    while(1)
    {
printf("1. Get availability\n");
printf("2. Features of room\n");
printf("3. Room allocation\n");
printf("4. Show customer details\n");
    printf("5. Room deallocation\n");
printf("6. Restaurant\n");
    printf("7. Billing\n");
printf("8. exit\n");
printf("choose any number from above\n");
scanf("%d",&ch);
switch(ch)
{
    case 1:get_availability();
```

```
        break;
        case 2:Features_of_room();
        break;
        case 3:Room_allocation();
        break;
        case 4:Show_customer_details();
        break;
        case 5:Room_deallocation();
        break;
        case 6:Restaurant();
        break;
        case 7:Billing();
        break;
        default:exit(0);
    }
}
}
void get_availability()
{
    printf("room\troomtype\tavailability\n");
    printf("101\ttdelux\tavailable\n");
    printf("102\tA/Croom\tavailable\n");
```

```
printf("103\tnonA/C\tavailable\n");
printf("104\tgeneral\tavailable\n");
}
void Features_of_room()
{
    int m;
    printf("1.sp.delux\n");
    printf("2.delux\n");
    printf("3.general\n");
    printf("4.couple\n");
    printf("enter u r choice");
    scanf("%d",&m);
    switch(m)
    {
        case 1:printf("Features of sp.delux\n");
            printf("a/c\n");
            printf("t.v\n");
            printf("cost:1000per/day\n");
            break;
        case 2:printf("Features of delux\n");
            printf("a/c\n");
```

```
printf("no t.v\n");  
printf("cost:5000per/day\n");  
break;  
case 3:printf("Features of general\n");  
printf("non a/c\n");  
printf("no t.v\n");  
printf("cost:2000per/day\n");  
break;  
case 4:printf("Features of couple\n");  
printf("a/c\n");  
printf("t.v\n");  
printf("extra beds\n");  
printf("cost:20000\nper/day\n");  
break;  
default:exit(0);  
}
```

```
}
```

```
void Room_allocation()
```

```
{
```

```
    a=(struct hotel*)malloc(sizeof(struct hotel));  
    printf("enter the room number\n");  
    scanf("%d",&a->roomnumber);
```

```
printf("enter the name\n");
scanf("%s",&a->name);
printf("enter the phone number\n");
scanf("%d",&a->phonenum);
printf("enter the nationality\n");
    scanf("%s",&a->nationality);
printf("enter the year which u have entered\n");
scanf("%d",&a->yearin);
printf("enter the date which u have entered \n");
    scanf("%d",&a->datein);
printf("enter the month which u have entered \n");
scanf("%d",&a->monthin);
    printf("theroom number:%d\n",a->roomnumber);
    printf("name of customer:%s\n",a->name);
    printf("phone number is:%d\n",a->phonenum);
    printf("nationality:%s\n",a->nationality);
    printf("year:%d\n",a->yearin);
printf("date:%d\n",a->datein);
printf("month:%d\n",a->monthin);
}
void Show_customer_details()
{
```

```
printf("name:%s\n",a->name);
printf("room number:%d\n",a->roomnumber);
printf("nationality:%s\n",a->nationality);
printf("year:%d\n",a->yearin);
printf("date:%d\n",a->datein);
printf("month:%d\n",a->monthin);

}
void Room_deallocation()
{
    printf("ROOM DEALLOCATION\n");
    printf("enter the date which u want to leave\n");
    scanf("%d",&a->outdate);
    printf("enter the month which u want to leave\n");
    scanf("%d",&a->outmonth);
    printf("enter the year which u want to leave\n");
    scanf("%d",&a->outyear);
    printf("date:%d\tyear:%d\tmonth:%d\n",a->outdate,a-
>outyear,a->outmonth);
    printf("theroomnumber:%dis deallocated and available to
book for others\n",a->roomnumber);
```

```
}  
  
void Restaurant()  
{   int n;  
    printf("1.blackforest\n2.vanilla\n3.chocolate\n4.butter  
scotch\n5.richcoffee\n");  
    printf("select what u want");  
    scanf("%d",&n);  
    printf("sl.no\titeam name\tcost\n");  
    switch(n)  
    {  
        case 1:  
            printf("1\tblackforest\t395\n");  
            break;  
        case 2:  
            printf("2\tvanilla\t30\n");  
            break;  
        case 3:  
            printf("3\tchocolate\t50\n");  
            break;  
        case 4:  
            printf("4\tbutterscotch\t50\n");  
            break;
```


case 5:

```
printf("5\trichcoffee\t50\n");
```

```
break;
```

```
default:exit(0);
```

```
}
```

```
}
```

```
void Billing()
```

```
{
```

```
printf("enter the rent");
```

```
scanf("%d",&a->rent);
```


```
printf("the rent of the room is:%d\n",a->rent);
```

```
printf("THANKS FOR CHOOSING OUR HOTEL :) \n");
```

```
}
```

OUTPUTS

Screen Shots:

 C:\Users\T NAVEEN KUMAR\OneDrive\Desktop\C LAN\pointers to structures.exe

```
1. Get availability
2. Features of room
3. Room allocation
4. Show customer details
5. Room deallocation
6. Restaurant
7. Billing
8. exit
choose any number from above
1
room    roomtype    availability
101     delux    available
102     A/Croom  available
103     nonA/C   available
104     general  available
1. Get availability
2. Features of room
3. Room allocation
4. Show customer details
5. Room deallocation
6. Restaurant
7. Billing
8. exit
choose any number from above
2
1.sp.delux
2.delux
3.general
4.couple
enter u r choice2
Features of delux
a/c
no t.v
cost:5000per/day
1. Get availability
2. Features of room
3. Room allocation
4. Show customer details
5. Room deallocation
6. Restaurant
7. Billing
8. exit
choose any number from above
3
enter the room number
101
enter the name
mrudhula
enter the phone number
9121814408
```

```
enter the phone number
9121814408
enter the nationality
india
enter the year which u have entered
2020
enter the date which u have entered
10
enter the month which u have entered
12
the room number:101
name of customer:mrudhula
phone number is:12610508
nationality:india
year:2020
date:10
month:12
1. Get availability
2. Features of room
3. Room allocation
4. Show customer details
5. Room deallocation
6. Restaurant
7. Billing
8. exit
choose any number from above
4
name:mrudhula
room number:101
nationality:india
year:2020
date:10
month:12
1. Get availability
2. Features of room
3. Room allocation
4. Show customer details
5. Room deallocation
6. Restaurant
7. Billing
8. exit
choose any number from above
5
ROOM DEALLOCATION
enter the date which u want to leave
12
enter the month which u want to leave
12
enter the year which u want to leave
2020
```

C:\Users\T NAVEEN KUMAR\OneDrive\Desktop\C LAN\pointers to structures.exe

```
enter the year which u want to leave
2020
date:12 year:2020      month:12
the roomnumber:101 is deallocated and available to book for others
1. Get availability
2. Features of room
3. Room allocation
4. Show customer details
5. Room deallocation
6. Restaurant
7. Billing
8. exit
choose any number from above
6
1.blackforest
2.vanilla
3.chocolate
4.butter scotch
5.richcoffee
select what u want3
sl.no   item name      cost
3       chocolate     50
1. Get availability
2. Features of room
3. Room allocation
4. Show customer details
5. Room deallocation
6. Restaurant
7. Billing
8. exit
choose any number from above
7
enter the rent20000
the rent of the room is:20000
THANKS FOR CHOOSING OUR HOTEL :)
1. Get availability
2. Features of room
3. Room allocation
4. Show customer details
5. Room deallocation
6. Restaurant
7. Billing
8. exit
choose any number from above
8

-----
Process exited after 152.6 seconds with return value 0
Press any key to continue . . .
```

CONCLUSION

BY THIS PROJECT I CAME TO COMPLETE THE TASK BY ASSUMING MY OWN ABOUT THE SYSTEM OF HOTEL MANAGEMENT I CAME TO KNOW ABOUT THE STRUCTURES TO POINTERS IN A CLEAR WAY. SUCCESSFULLY COMPLETED MY PROJECT ON HOTEL MANAGEMENT. SUCCESSFULLY IMPLEMENTED THE CODE IN C LANGUAGE AND CAME TO KNOW ABOUT THE SWITCH CASE AND STRUCTURES PERFECTLY.