# DAYANANDA SAGAR UNIVERSITY

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
SCHOOL OF ENGINEERING
DAYANANDA SAGAR UNIVERSITY
KUDLU GATE
BANGALORE - 560068

**MINI PROJECT REPORT**

*ON*

## "HOTEL RESERVATION SYSTEM"

**SUBMITTED TO THE 3rd SEMESTER DATA STRUCTURE AND APPLICATIONS LABORATORY**

**BACHELOR OF TECHNOLOGY**

*IN*

**COMPUTER SCIENCE & ENGINEERING**

***Submitted by***

NIVEDHITHA – (ENG18CS0151)

***Under the supervision of***

**Prof. Ankita Singhai**

# DAYANANDA SAGAR UNIVERSITY

## School of Engineering, Kudlu Gate, Bangalore-560068


## CERTIFICATE

*This is to certify that Mr./Ms.* _____ *bearing USN* _____ *has satisfactorily completed his/her Mini Project as prescribed by the University for the* _____ *semester B.Tech. programme in Computer Science & Engineering during the year* _____ *at the School of Engineering, Dayananda Sagar University., Bangalore.*

Date: _____ _____

Signature of the faculty in-charge

| Max Marks | Marks Obtained |
|---|---|
| | |

_____

Signature of Chairman

# ACKNOWLEDGEMENT

I am pleased to acknowledge **Prof. Ankita Singhai** for her invaluable guidance, support, motivation and patience during the course of this mini- project work.

I extend my sincere thanks to our **Chairman Dr. Banga M.K** who continuously helped throughout the project and without his guidance, this project would have been an uphill task.

I have received a great deal of guidance and co-operation from my friends and I wish to thank one and all that have directly or indirectly helped me in the successful completion of this mini-project work.

# TABLE OF CONTENTS



## PROBLEM STATEMENT

A typical luxury hotel requires a management system to control its various day-to-day activities such as maintaining account of all the people in its domain of its services, attending to the various need of customers and also achieving increased efficiency in the overall working of the hotel itself.

# ABSTRACT

As we are beginners and have no practical experience in the field of software development and moreover the Hotel Reservation System is a very vast network, we limit the scope if our project by computerizing the following fields of the Hotel Reservation System :

1. Getting the information.
2. Gathering customer information who are logged in.
3. Allocating a room to the customer.
4. Checking the availability.
5. Printing a billing function for the customer according to his room no.

In the software developed, there will be separate functions for each of the above points so that there is ample scope for adding more features in the near future.

# INTRODUCTION

The Hotel Reservation System aims to make a staff's interaction with the various modules of the Hotel simpler and ease the process of acquiring information and providing services. The system can be accesses by the admin and the customers but the highest priority given to the admin that are allocated a login id and password.

This system is advantageous as it will serve the admin or user to be updated about the records without any strain and it is favoured much by the people involved in the business sector. Being aware of the busy and hectic schedule of the people, this Hotel Reservation System turns out to be a great relief for them. It definitely has a wide scope to minimize errors in the making of bills and it also limits the delay of delivering bills to the customers which can include taxes on the basis of their expenditure. The Hotel Reservation program is rooted on c. In the making of this program, the users or admins comfort and reliability is put into consideration which focuses to save one's quality time. The system has very less chance of losing data and there's no necessity of worrying about it being damaged.

# SOFTWARE AND HARDWARE REQUIREMENTS

## Software requirements :

- Ubuntu (16.04)

## Hardware requirements :

- PC or Laptop

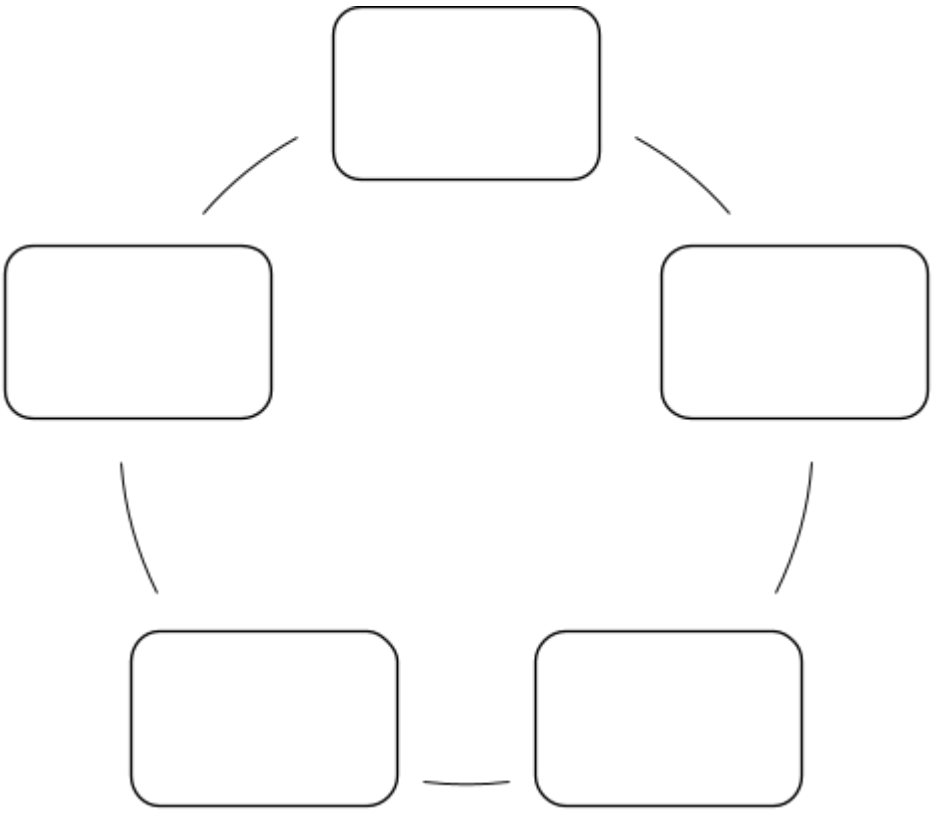
  RAM min- 512 MB

  Hard disk space-500MB

# METHODOLOGY

In this project, we are using the Array data structures. An array is a group of consecutive memory locations with same name and data type. We have used array data structure because it stores a large no. of values with single name, process many values quickly and it can be searched as well as sorted easily.

**Flowchart depicting the Hotel Reservation System**



# CODE

```
void ScreenWel();
```

```
 void Login();
 void frame();
 void admin();
 void mm1();
 void mm2();
 void mm3();
 void back();

int fr,bsr,bdr,bfr,btr;
struct Room
  {
    int Rnum;
    char Rtype[10];
    char Cname[50];
  };
int main()
   {

     ScreenWel();
     Login();
     return 0;
   }


void ScreenWel()
   {
```

```
printf("\n\n WELCOME \n ->->TO \n KETINENI'S GUEST HOUSE\n");


  }
void Login()
 {
    fr=3;
    int id ;
    int pa;
    frame();
    printf("::Please Enter your login information to the system ::\n");
    frame();
    printf("::\n");
    printf("::\n");
    printf("User id ");
    scanf("%d",&id);
    printf("::\n");
    printf("Password");
    scanf("%d",&pa);
    printf("::\n");
    printf("::\n");
    printf("::-::-::-::-::-::\n");
   if(id==111 &&pa==111)
     {
          system("cls");
          printf("\n:::\nLogin successful::\n\n");
          admin();
```

```
    }

//
  else
    {
        system("cls");
     printf("\n Login unsuccessful  please  try again  ::\n\n");
     Login();
    }

 }
void admin()
 {
   int a;
   ScreenWel();
 printf(" please select your option\n\n1- See Avalabile Rooms\n\n2- Reserve a room\n\n3- Log off\n\n");
scanf("%d",&a);
   switch(a)
       {
           case 1:
                system("cls");
                ScreenWel();
                printf("\nSee Avalabile Rooms\n========\n");
                mm1();
                break;
           case 2:
```

```
                system("cls");
                ScreenWel();
            printf("\nReserve a room\n\n");
                mm2();
                break;
          case 3:
                mm3();
                break;
          default:
             system("cls");
          printf("invalid input Please Try Again\n");
                admin();
         }
  }
void mm1()
  {
   int sr=10-bsr;
   int dr=15-bdr;
   int tr=5-btr;
   int fr=3-bfr;
printf("\n\nAvailable  single Rooms -%d\n\n*Price per 1 Night-Rs.7000\n\nAvailable double rooms -%d\n\n *Price Per 1 Night-Rs.11000\n\nAvalble Triple rooms -%d\n\n*price per 1 Night-Rs.15000\n\nAvailable Family rooms -%d\n\n*price per 1 Night-Rs.20000\n\n ",sr,dr,tr,fr);
          back();
  }
void mm2()
```

```
{
 int sr=10;
 int dr=15;
 int tr=5;
 int fr=2;
 int N,tot,q;
 int psr=7000;
 int pdr=11000;
 int ptr=15000;
 int pfr=20000;
 int i=0;
 char SR[3]={"sr"};
 char DR[3]={"dr"};
 char TR[3]={"tr"};
 char FR[3]={"fr"};
struct Room room[35];
      for(i=0;i<35;i++)
    {
        printf("\nPlease Enter Type of Room  [sr-Single Room dr-Doubble Room tr-Tripple Room fr-Family Room]\n");
        scanf("%s",room[i].Rtype);
         if(strcmp(SR,room[i].Rtype)==0 && sr>0)
        {
            printf("\n%d single rooms are avalbale\n\n",sr);
        printf("How many rooms need\n");
            scanf("%d",&bsr);
```

```
      for(i=0;i<(bsr);i++)
     {
      printf("\nEnter Room Number\n");
      scanf("%d",&room[i].Rnum);
             }
              sr=sr-bsr;
       }
    else if(strcmp(DR,room[i].Rtype)==0 && dr>0)
   {
       printf("\n%d Doubble rooms are avalbale\n\n",dr);
   printf("How many rooms need\n");
       scanf("%d",&bdr);
       for(i=0;i<bdr;i++)
    {
      printf("\nEnter Room Number\n");
             scanf("%d",&room[i].Rnum);
            }
             dr=dr-bdr;
       }
else if(strcmp(TR,room[i].Rtype)==0 &&tr>0)
   {
        printf("\n%d Tripple rooms are avalbale\n\n",tr);
    printf("How many rooms need\n");
        scanf("%d",&btr);
           for(i=0;i<btr;i++)
    {
```

```
                printf("\nEnter Room Number\n");
              scanf("%d",&room[i].Rnum);
             }
                tr=tr-btr;
           }
         else if(strcmp(FR,room[i].Rtype)==0 &&fr>0)
        {
            printf("\n%dFamily rooms are avalbale\n\n",fr);
         printf("How many rooms need\n");
            scanf("%d",&bfr);
         for(i=0;i<bfr;i++)
           {
                  printf("\nEnter Room Number\n");
                  scanf("%d",&room[i].Rnum);
                 }
             fr=fr-bfr;
        }
          else
        {
             printf("\nAll Rooms Are currently booked\nPress any key to continue or 1 - main
menu");
            scanf("%d",&q);
            if(q==1)
           {
                  system("cls");
                  admin();
```

```
            }
              else
            {

                    system("cls");
                    mm2();
                   }
          }
printf("\nCoustomer Name\n");
scanf("%s",room[i].Cname);
printf("\nEnter number of Nighs\n");
scanf("%d",&N);
tot=(psr+pdr+pfr+ptr)*(bfr+bsr+bdr+btr)*N;
printf("\nTotal cost is RS %d",tot);
printf("\nPress-1 to main menu or num to next customer\n");
scanf("%d",&q);
if(q==1)
 {
  system("cls");
  admin();
 }
else
 {
  system("cls");
  ScreenWel();
 }
```

```
}
}
void mm3()
  {
   int a;
   printf("\nAre you sure you want to Log Off?\n 1-yes    any num  continue\n ");
   scanf("%d",&a);
   if(a==1)
      {
       system("cls");
       ScreenWel();
       Login();
      }
   else
     {
      system("cls");
      admin();
     }
  }
void frame()
 {
  int i;
  for(i=0;i<fr;i++)
   {
     printf("::::\n");
    }
```

```
 }
void back()
   {
    int ba;
    printf("\n**********Press 1 to back to the main menu**********\n");
    scanf("%d",&ba);
    if(ba==1)
     {
      system("cls");
      admin();
     }
   else
    {
    printf("\nWrong input check your input!!!!!!!!!!!!!\n");
    back();
    }
  }
```

# RESULT

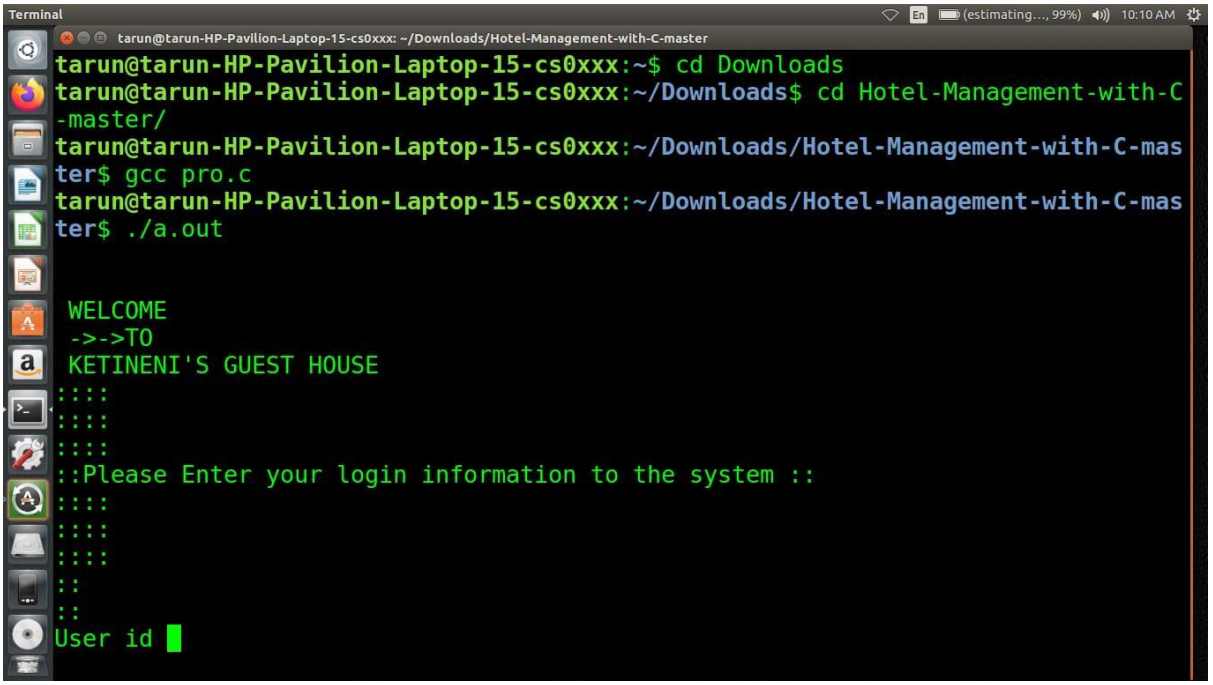



Fig 1. Creating login id and password

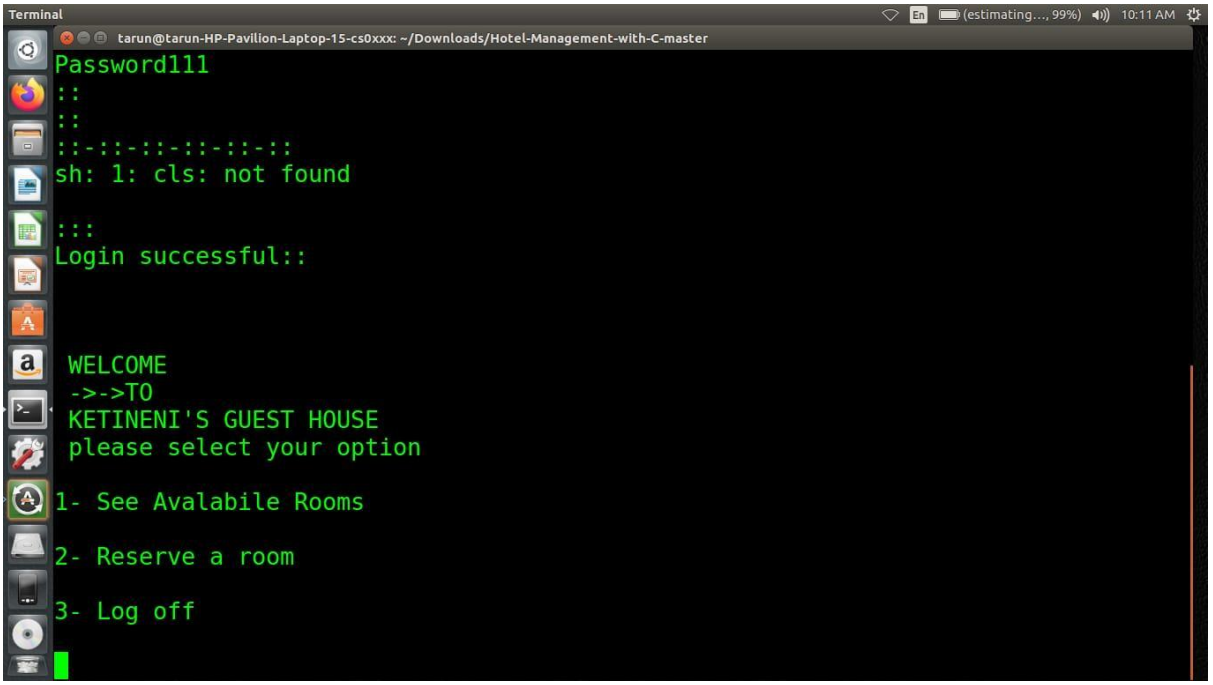



Fig 2. Welcome Screen

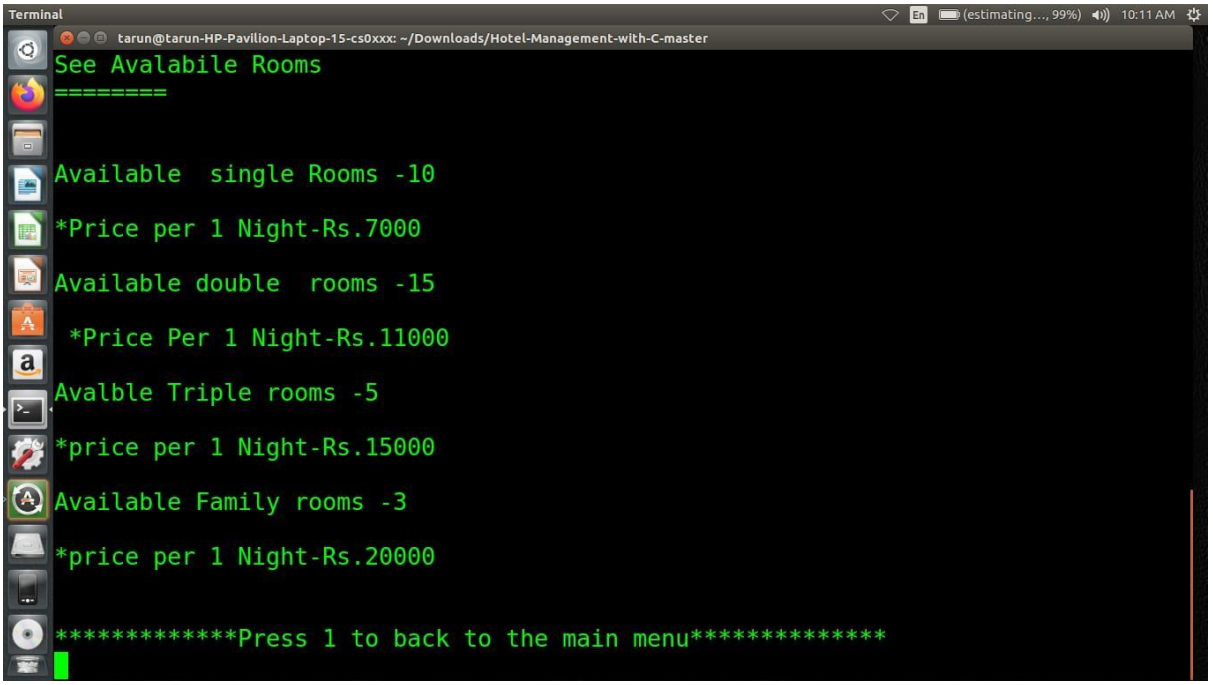



Fig 3. Displaying availability of rooms along with the cost per night.

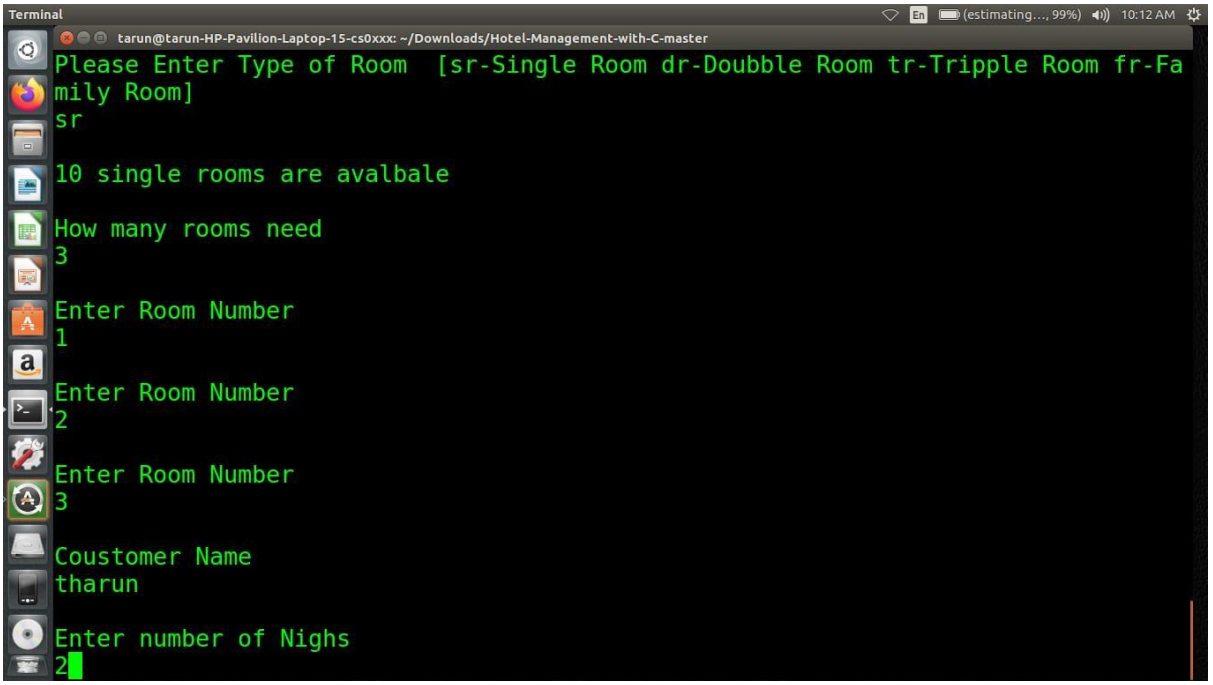



Fig 4. Reserving the rooms

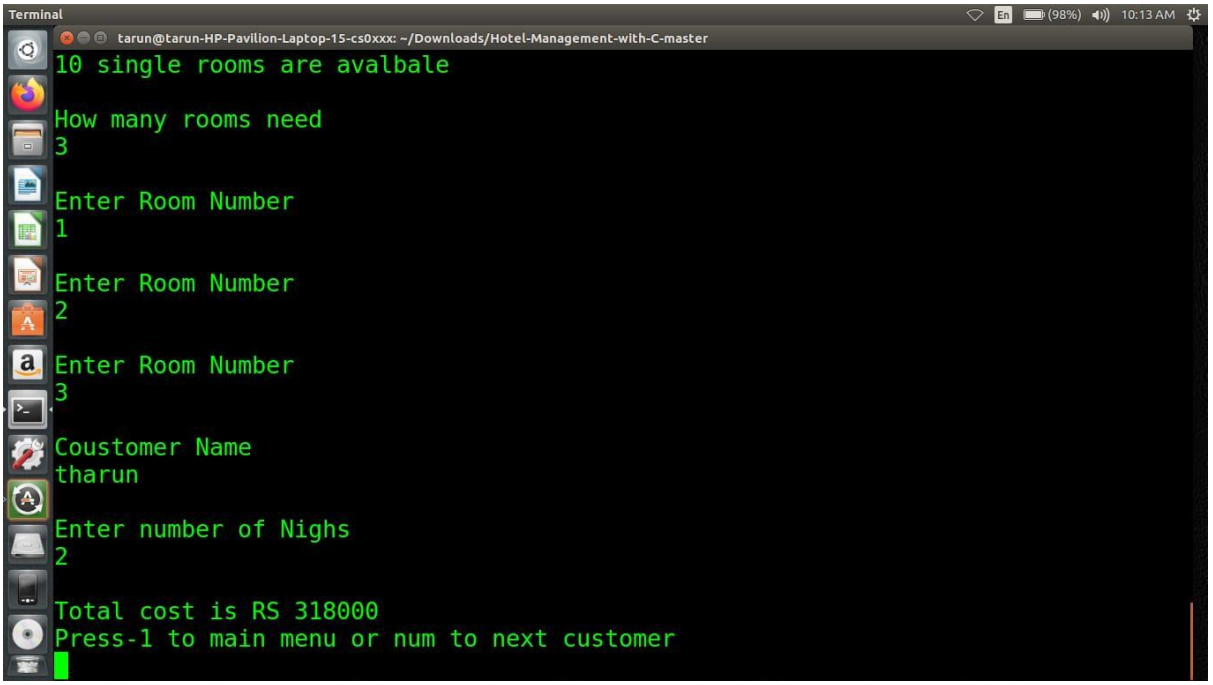



Fig 5. Displaying total cost of the selected rooms

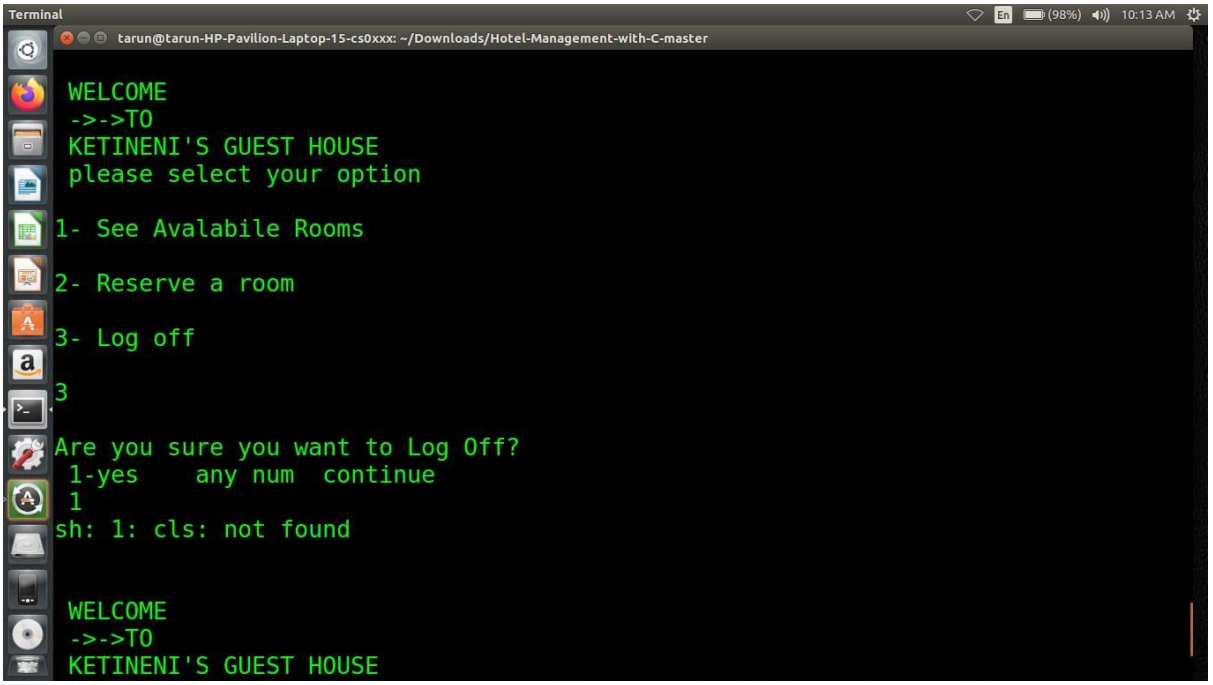



Fig 6. Checking out of the Hotel

# CONCLUSION

At the end of this coursework I was able to understand the uses and advantages of the array data structures in everyday life.

This project is intended to ease the needs of staff as well as the customer in a Hotel management sector by embedding all the operations taking place in a Hotel.

The project can be enhanced in the future version by proving the customer the option to order food and add more features to the room.

# REFERENCES


1. www.codeproject.com
2. https://www.codewithc.com
3. https://github.com