

MINI PROJECT REPORT  
HOTEL MANAGEMENT SYSTEM  
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## 0.1 Objective

The main objective of this mini project 'Hotel Management System' is to serve the basic functions required by a hotel such as room booking, food order etc.

This mini project includes 10 functions as below.

The code written in Python includes 208 lines and the code in C includes 287 lines.

## 0.2 Function Description

### 1. Home Function

This function displays the front page or home page. The user can select any function to perform.

### 2. RoomBooking

This function books the room if it is already not booked. This function takes input from user, their name address phone number and room number. And Store them in respective arrays.

### 3. RoomCancellation

Using this function users can cancel their booked room by entering their room number. This function delete the corresponding entries from the arrays.

#### 4. RoomInfo

This function prints all information about the booked rooms from the corresponding arrays.

#### 5. Search Coustomer

This function allows users to search the information about any room using their name. It prints name, room number, address and phone number from the corresponding arrays.

#### 6. MenuCard

This function prints the menu card of the hotel with their prices.

#### 7. Food Order

This function takes the input of dishes they want from the user and then calculate the total price. It also calls the next method discount to calculate discount.

#### 8. Discount

This method gives a discount of 10 If total price is greater than 200 and 5 if price is greater than 100. Then this method calls the next method bill generate to generate the bill.

#### 9. BillGenerate

The bill generate method takes input as name and phone number then prints the bill along with the discount and the final price to be paid. It also prints the current date and time. Along with the bill number which is generated randomly using random module.

#### 10. Feedback

The feedback method allows the users to give star rating out of five to the Hotel Raj Mahal.



```
Python 3.6.7 Shell
File Edit Shell Debug Options Window Help

7. Exit
Enter your choice:2
-----Menu Card-----

1 Regular Tea..... 20.00
2 Masala Tea..... 25.00
3 Coffee..... 25.00
4 Cold Drink..... 25.00
5 Bread Butter..... 30.00
6 Bread Jam..... 30.00
7 Veg. Sandwich..... 50.00
8 Veg. Toast Sandwich.... 50.00
9 Cheese Toast Sandwich... 70.00
10 Grilled Sandwich.....70.00
11 Tomato Soup..... 100.00
12 Hot & Sour..... 100.00
13 Veg. Noodle Soup..... 100.00
14 Sweet Corn..... 100.00
15 Veg. Munchow..... 100.00
16 Shahi Paneer..... 100.00
17 Kadai Paneer..... 100.00
18 Handi Paneer..... 120.00
19 Palak Paneer..... 120.00
20 Chilli Paneer..... 120.00

Enter item no. or else enter 0:
```

```
Python 3.6.7 Shell
File Edit Shell Debug Options Window Help

Enter item no. or else enter 0:6
Enter item no. or else enter 0:19
Enter item no. or else enter 0:7
Enter item no. or else enter 0:0
Total Bill: 200
Congratulations!!! you get 10% discount.

---Bill Generate---
Enter your Name: himanshi
Enter your Phone No.: 555

-----HOTEL RAJMAHAL-----
Sudama Nagar, Indore
contact no.- 123456

2022-11-15 13:34:29.353200
Bill no.= 315

Name- himanshi
phone- 555

your total bill is Rs. 200
discount= 20.0
amount payable: Rs. 180.0

Thank you!!!!
Visit again!!!
>>> |
```

```
Python 3.6.7 Shell
File Edit Shell Debug Options Window Help
enter room number
Room booked successfully

----- WELCOME TO HOTEL RAJMAHAL-----

what would you like to do today?
1. Room Booking
2. Food Order
3. Room Cancellation
4. Room Info
5. Search customer
6. Feedback
7. Exit
Enter your choice:3
Enter your room no.
5
Room cancelled successfully

----- WELCOME TO HOTEL RAJMAHAL-----
```

```
Python 3.6.7 Shell
File Edit Shell Debug Options Window Help

5. Search customer
6. Feedback
7. Exit
Enter your choice:4
-----Room Info-----
Room No.= 5 ; Name= himanshi ; Phone No.= 555 ; Address= indore
-----
Room No.= 7 ; Name= riti ; Phone No.= 777777777 ; Address= 7
-----
----- WELCOME TO HOTEL RAJMAHAL-----
what would you like to do today?
1. Room Booking
2. Food Order
3. Room Cancellation
4. Room Info
5. Search customer
6. Feedback
7. Exit
Enter your choice:
```

```
Python 3.6.7 Shell
File Edit Shell Debug Options Window Help
7. Exit
Enter your choice:4
-----Room Info-----

Room No.= 5 ; Name= himanshi ; Phone No.= 555 ; Address= indore
-----
Room No.= 7 ; Name= riti ; Phone No.= 777777777 ; Address= 7
-----
----- WELCOME TO HOTEL RAJMAHAL-----

what would you like to do today?
1. Room Booking
2. Food Order
3. Room Cancellation
4. Room Info
5. Search customer
6. Feedback
7. Exit
Enter your choice:5
Enter your Name:riti
Name= riti Room No.= 7 Phone No.= 777777777 Address= 7
>>>
>>>
>>> |
```



```
Python 3.6.7 Shell
File Edit Shell Debug Options Window Help
what would you like to do today:
1. Room Booking
2. Food Order
3. Room Cancellation
4. Room Info
5. Search customer
6. Feedback
7. Exit
Enter your choice:6

How many stars would you give to Hotel Rajmahal(out of 5)

Enter your rating8
Please give rating out of 5

How many stars would you give to Hotel Rajmahal(out of 5)

Enter your rating4
your rating is:
* * * *
>>>
\\
```

## 0.4 Output Screenshots (C)

The image displays two screenshots of a C program running in a compiler IDE. The top screenshot shows the code for a hotel management system, and the bottom screenshot shows the output of the program.

**Top Screenshot: Code**

```
118         break;
119     }
120     else
121     {
122         printf("Room not booked!\n\n");
123     }
124 }
125
126 // Room Info
127 void RoomInfo()
128 {
129     int i;
130     printf("-----Room Info-----\n");
131     int len = sizeof(rooms)/4;
132     if (len > 0)
133     {
134         for(i=0; i<len; i++)
135         {
136             printf("Room No.=%d", rooms[i].RoomNo, names[i].PhoneNo, addresses[i]);
137             printf("-----\n");
138         }
139     }
140     else
141     {
142         printf("No Rooms booked!\n\n");
143     }
144 }
145
146 // Search Customer
```

**Bottom Screenshot: Output**

```
Output
/tmp/STXKdVgSTR.o
----- WELCOME TO HOTEL RAJMAHAL-----
what would you like to do today?
1. Room Booking
2. Food Order
3. Room Cancellation
4. Room Info
5. Search customer
6. Feedback
7. Exit
Enter your choice:
Enter your choice: 1
-----ROOM BOOKING-----
Enter your Name:
hjnanshi
Enter your Phone No.:
555
Enter your Address:
indore
enter room number
5
Room booked successfully

----- WELCOME TO HOTEL RAJMAHAL-----
what would you like to do today?
1. Room Booking
2. Food Order
```



```

C Online Compiler
INTERACTIVE C++ ONLINE COMPILER

main.c
242 }
243
244 //BillGenerate
245 void BillGenerate(int r,int d)
246 {
247     printf("\n---Bill Generate---");
248     char name[20];
249     printf("Enter your Name: ");
250     scanf("%s",&name);
251     int phone;
252     printf("Enter your Phone No.: ");
253     scanf("%d",&phone);
254     printf("\n-----HOTEL RAJMAHAL-----");
255     printf("Sudana Nagar, Indore\n");
256     printf("contact no.- 123456\n");
257     time_t t;
258     time(&t);
259     printf("Bill no.=%d",rand());
260     printf("Name=%s",name);
261     printf("phone=%d",phone);
262     printf("your total bill is Rs.%d\n",r);
263     int dis=r*d/100;
264     printf("discount=%d\n",dis);
265     printf("amount payable: Rs. %d\n",r-dis);
}

Output
----- 50.00 8 Veg. Toast Sandwich..... 50.00 9 Cheese Toast
Sandwich... 70.00 10 Grilled Sandwich.....70.00 11 Tomato Soup
----- 100.00 12 Hot & Sour..... 100.00 13 Veg. Noodle Soup
----- 100.00 14 Sweet Corn..... 100.00 15 Veg. Munchow
----- 100.00 16 Shuhi Paneer..... 100.00 17 Kaddi Paneer
----- 100.00 18 Mandsi Paneer..... 120.00 19 Palak Paneer
----- 120.00 20 Chilli Paneer..... 120.00

Enter item no. or else enter 0: 4
Enter item no. or else enter 0: 6
Enter item no. or else enter 0: 0
Total Bill: 55
---Bill Generate---Enter your Name: himi
Enter your Phone No.: 555
-----HOTEL RAJMAHAL-----
Sudana Nagar, Indore
contact no.- 123456

Bill no.=1804289383
Name=himi phone=555
your total bill is Rs.55
discount=6
amount payable: Rs. 55
Thank you!!!
Visit Agash!!!

```

```

main.c
145 char n[20];
146 printf("Enter your Name:");
147 scanf("%s",&n);
148 int len=(sizeof(names))/(sizeof(char));
149 int i,flag;
150 for(i=0;i<len;i++)
151 {
152     if (names[i]==n)
153         flag=0;
154     else
155         flag=1;
156 }
157 if (flag==0)
158     printf("Name=%s",names[i]," Room No.=%d",rooms[i]," Phone No.=%d"
        ,phones[i]," Address=%s",addresses[i]);
159 else
160     printf("No entry of name %s\n",n);
161 }
162
163 // MenuCard
164 void MenuCard()
165 {
166     printf("-----Menu Card-----\n\n");
167     printf("1 Regular Tea..... 20.00");
168     printf("2 Masala Tea..... 25.00");
169     printf("3 Coffee..... 25.00");
170     printf("4 Cold Drink..... 25.00");
}

Output
rcapintKQv0nyto.o
----- WELCOME TO HOTEL RAJMAHAL-----
what would you like to do today?
1. Room Booking
2. Food Order
3. Room Cancellation
4. Room Info
5. Search customer
6. Feedback
7. Exit
Enter your choice:5
Enter your Name himi
No entry of Name himi

```

## 0.5 Profiling Screenshots

The first screenshot shows the execution of a Python script. The output is as follows:

```
discount= 0.0
amount payable: Rs. 30.0

Thank you!!!!
Visit again!!!!
4761 function calls in 26.382 seconds
```

The second screenshot shows the profiling report, ordered by standard name. The report is a table with the following columns: ncalls, tottime, percall, cumtime, percall, filename:lineno(function).

ncalls	tottime	percall	cumtime	percall	filename:lineno(function)
1	0.000	0.000	26.382	26.382	<string>:1(<module>)
1	0.000	0.000	2.303	2.303	_sitebuiltins.py:19(__call__)
1	0.000	0.000	0.189	0.189	miniprojt.py:105(MenuCard)
1	0.000	0.000	18.078	18.078	miniprojt.py:131(FoodOrder)
1	0.000	0.000	26.382	26.382	miniprojt.py:16(Home)
1	0.000	0.000	6.233	6.233	miniprojt.py:166(Discount)
1	0.000	0.000	6.233	6.233	miniprojt.py:178(BillGenerate)
1	0.000	0.000	0.000	0.000	random.py:173(randrange)
1	0.000	0.000	0.000	0.000	random.py:223(_randbelow)
784	0.000	0.000	0.000	0.000	rpc.py:154(debug)
112	0.001	0.000	26.373	0.235	rpc.py:217(remotecall)
112	0.001	0.000	0.390	0.003	rpc.py:227(asynccall)
112	0.001	0.000	25.982	0.232	rpc.py:247(asyncreturn)
112	0.000	0.000	0.000	0.000	rpc.py:253(decoderesponse)
112	0.000	0.000	25.981	0.232	rpc.py:291(getresponse)
112	0.000	0.000	0.000	0.000	rpc.py:299(_proxify)
112	0.002	0.000	25.980	0.232	rpc.py:307(_getresponse)
112	0.000	0.000	0.000	0.000	rpc.py:329(newseq)
112	0.002	0.000	0.387	0.003	rpc.py:333(putmessage)

The second screenshot shows the continuation of the profiling report, listing various system and library functions.

ncalls	tottime	percall	cumtime	percall	filename:lineno(function)
112	0.000	0.000	0.000	0.000	rpc.py:299(_proxify)
112	0.002	0.000	25.980	0.232	rpc.py:307(_getresponse)
112	0.000	0.000	0.000	0.000	rpc.py:329(newseq)
112	0.002	0.000	0.387	0.003	rpc.py:333(putmessage)
111	0.001	0.000	0.002	0.000	rpc.py:560(_getattr)
112	0.001	0.000	0.002	0.000	rpc.py:57(dumps)
1	0.000	0.000	0.001	0.001	rpc.py:578(_getmethods)
111	0.000	0.000	0.000	0.000	rpc.py:602(_init)
111	0.000	0.000	26.371	0.238	rpc.py:607(_call)
105	0.007	0.000	0.492	0.005	run.py:354(write)
5	0.000	0.000	23.586	4.717	run.py:397(readline)
1	0.000	0.000	2.303	2.303	run.py:413(close)
224	0.000	0.000	0.001	0.000	threading.py:1230(current_thread)
112	0.001	0.000	0.002	0.000	threading.py:215(_init)
26	0.000	0.000	25.977	0.999	threading.py:263(wait)
112	0.001	0.000	0.001	0.000	threading.py:74(RLock)
112	0.000	0.000	0.000	0.000	(built-in method _struct.pack)
26	0.000	0.000	0.000	0.000	(built-in method _thread.allocate_lock)
224	0.000	0.000	0.000	0.000	(built-in method _thread.get_ident)
1	0.000	0.000	26.382	26.382	(built-in method builtins.exec)
5	0.000	0.000	23.615	4.723	(built-in method builtins.input)
229	0.000	0.000	0.000	0.000	(built-in method builtins.isinstance)
341	0.000	0.000	0.000	0.000	(built-in method builtins.len)
43	0.000	0.000	0.464	0.011	(built-in method builtins.print)
1	0.000	0.000	0.000	0.000	(built-in method now)
112	0.001	0.000	0.001	0.000	(built-in method select.select)
26	0.000	0.000	0.000	0.000	(method 'acquire_restore' of 'thread.RLock' objects)
26	0.000	0.000	0.000	0.000	(method 'is_owned' of 'thread.RLock' objects)
26	0.000	0.000	0.000	0.000	(method 'release_save' of 'thread.RLock' objects)



```

Python 3.6.7 Shell
File Edit Shell Debug Options Window Help
2.0 0.000 0.000 0.000 0.000 threading.py:202(wait)
112 0.001 0.000 0.001 0.000 threading.py:74(RLock)
112 0.000 0.000 0.000 0.000 (built-in method _struct.pack)
26 0.000 0.000 0.000 0.000 (built-in method _thread.allocate_lock)
224 0.000 0.000 0.000 0.000 (built-in method _thread.get_ident)
1 0.000 0.000 26.382 26.382 (built-in method builtins.exec)
5 0.000 0.000 23.615 4.723 (built-in method builtins.input)
229 0.000 0.000 0.000 0.000 (built-in method builtins.isinstance)
341 0.000 0.000 0.000 0.000 (built-in method builtins.len)
43 0.000 0.000 0.464 0.011 (built-in method builtins.print)
1 0.000 0.000 0.000 0.000 (built-in method now)
112 0.001 0.000 0.001 0.000 (built-in method select.select)
26 0.000 0.000 0.000 0.000 (method 'acquire restore' of 'thread.RLock' objects)
26 0.000 0.000 0.000 0.000 (method 'is owned' of 'thread.RLock' objects)
26 0.000 0.000 0.000 0.000 (method 'release save' of 'thread.RLock' objects)
112 0.000 0.000 0.000 0.000 (method 'acquire' of 'thread.RLock' objects)
52 25.977 0.500 25.977 0.500 (method 'acquire' of 'thread.lock' objects)
26 0.000 0.000 0.000 0.000 (method 'append' of 'collections.deque' objects)
1 0.000 0.000 0.000 0.000 (method 'bit_length' of 'int' objects)
1 0.000 0.000 0.000 0.000 (method 'disable' of 'lsprof.Profiler' objects)
112 0.001 0.000 0.001 0.000 (method 'dump' of '_pickle.Pickler' objects)
5 0.000 0.000 0.000 0.000 (method 'find' of 'str' objects)
111 0.000 0.000 0.000 0.000 (method 'get' of 'dict' objects)
1 0.000 0.000 0.000 0.000 (method 'getrandbits' of 'random.Random' objects)
112 0.000 0.000 0.000 0.000 (method 'getvalue' of 'io.BytesIO' objects)
112 0.000 0.000 0.000 0.000 (method 'release' of 'thread.RLock' objects)
112 0.382 0.003 0.382 0.003 (method 'send' of '_socket.socket' objects)

>>>

Python 3.6.7 Shell
File Edit Shell Debug Options Window Help
5. Search customer
6. Feedback
7. Exit
Enter your choice:7
2531 function calls (2530 primitive calls) in 47.735 seconds

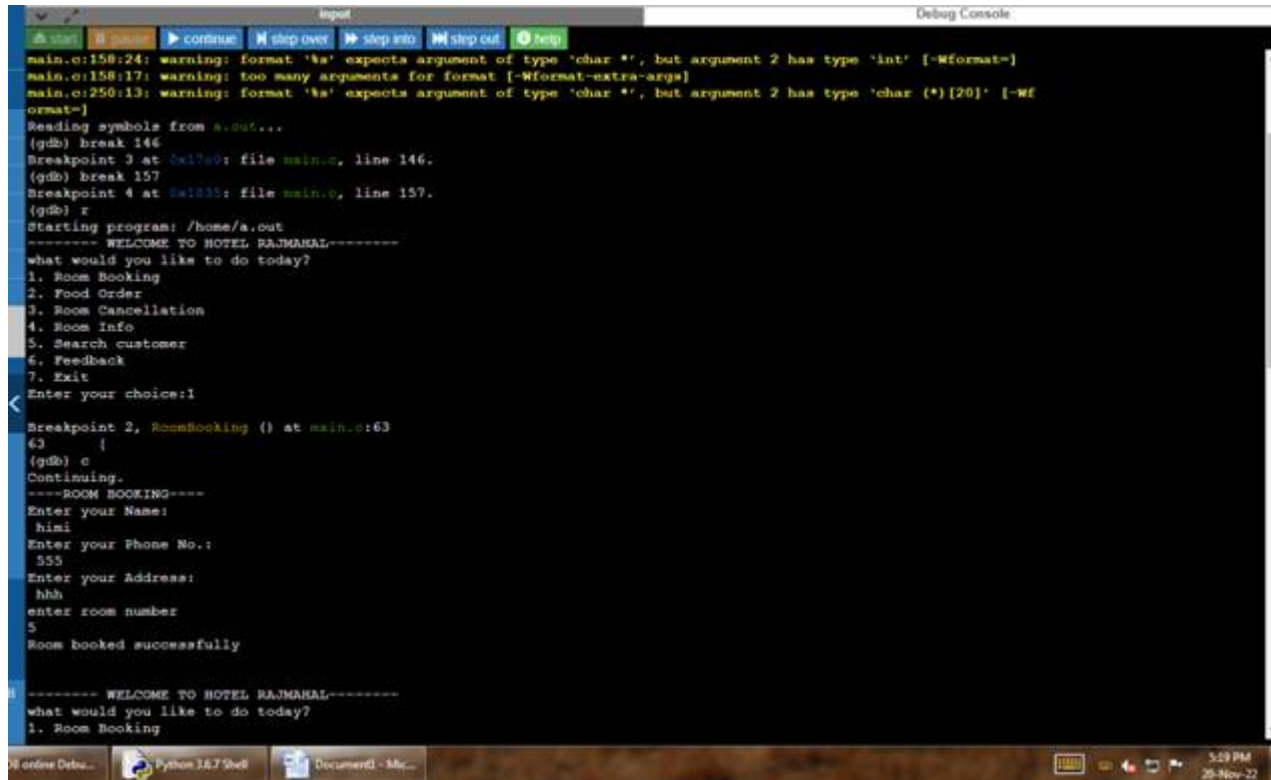
Ordered by: standard name

ncalls tottime percall cumtime percall filename:lineno(function)
1 0.000 0.000 47.735 47.735 <string>:1(<module>)
1 0.000 0.000 1.317 1.317 _sitebuiltins.py:19(__call__)
2/1 0.000 0.000 47.735 47.735 miniprojt.py:16(Home)
1 0.000 0.000 28.415 28.415 miniprojt.py:51(RoomBooking)
378 0.000 0.000 0.000 0.000 rpc.py:154(debug)
54 0.000 0.000 47.733 0.884 rpc.py:217(remotecall)
54 0.001 0.000 0.080 0.001 rpc.py:227(asynccall)
54 0.001 0.000 47.652 0.882 rpc.py:247(asyncreturn)
54 0.000 0.000 0.000 0.000 rpc.py:253(decoderesponse)
54 0.000 0.000 47.652 0.882 rpc.py:291(getresponse)
54 0.000 0.000 0.000 0.000 rpc.py:299(_proxify)
54 0.001 0.000 47.651 0.882 rpc.py:307(_getresponse)
54 0.000 0.000 0.000 0.000 rpc.py:329(newseq)
54 0.001 0.000 0.078 0.001 rpc.py:333(putmessage)
53 0.000 0.000 0.002 0.000 rpc.py:560(_getattr_)
54 0.001 0.000 0.003 0.000 rpc.py:57(dumps)
1 0.000 0.000 0.001 0.001 rpc.py:578(_getmethods)

```

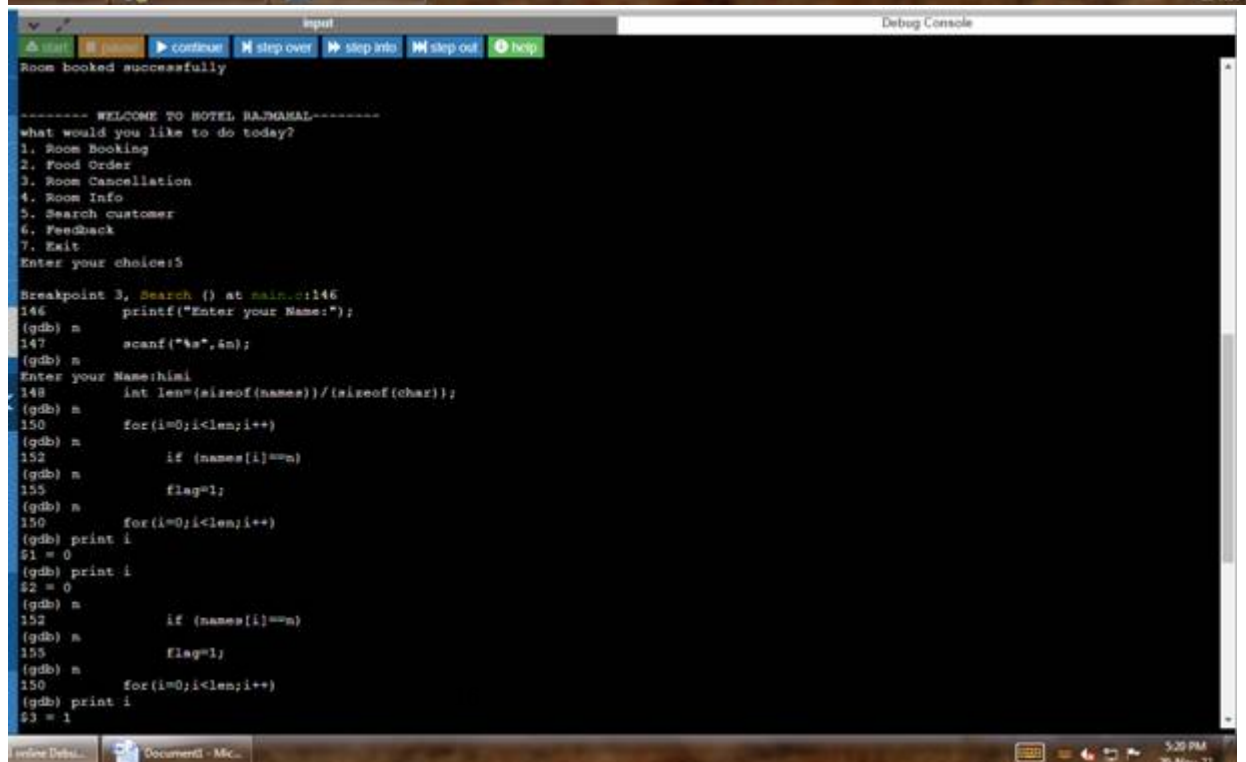
100	0.000	0.000	0.000	0.000	threading.py:1250(current_thread)				
54	0.000	0.000	0.001	0.000	threading.py:215(__init__)				
40	0.000	0.000	47.650	1.191	threading.py:263(wait)				
54	0.001	0.000	0.001	0.000	threading.py:74(RLock)				
54	0.000	0.000	0.000	0.000	(built-in method _struct.pack)				
40	0.000	0.000	0.000	0.000	(built-in method _thread.allocate_lock)				
108	0.000	0.000	0.000	0.000	(built-in method _thread.get_ident)				
1	0.000	0.000	47.735	47.735	(built-in method builtins.exec)				
6	0.000	0.000	46.200	7.700	(built-in method builtins.input)				
114	0.000	0.000	0.000	0.000	(built-in method builtins.isinstance)				
168	0.000	0.000	0.000	0.000	(built-in method builtins.len)				
20	0.000	0.000	0.218	0.011	(built-in method builtins.print)				
54	0.001	0.000	0.001	0.000	(built-in method select.select)				
40	0.000	0.000	0.000	0.000	(method '_acquire_restore' of '_thread.RLock' objects)				
40	0.000	0.000	0.000	0.000	(method '_is_owned' of '_thread.RLock' objects)				
40	0.000	0.000	0.000	0.000	(method '_release_save' of '_thread.RLock' objects)				
54	0.000	0.000	0.000	0.000	(method '_acquire' of '_thread.RLock' objects)				
80	47.649	0.596	47.649	0.596	(method '_acquire' of '_thread.lock' objects)				
40	0.000	0.000	0.000	0.000	(method 'append' of 'collections.deque' objects)				
4	0.000	0.000	0.000	0.000	(method 'append' of 'list' objects)				
1	0.000	0.000	0.000	0.000	(method 'disable' of 'cProfile.Profiler' objects)				
54	0.002	0.000	0.002	0.000	(method 'dump' of '_pickle.Pickler' objects)				
6	0.000	0.000	0.000	0.000	(method 'find' of 'str' objects)				
53	0.000	0.000	0.000	0.000	(method 'get' of 'dict' objects)				
54	0.000	0.000	0.000	0.000	(method 'getvalue' of 'io.BytesIO' objects)				
54	0.000	0.000	0.000	0.000	(method 'release' of '_thread.RLock' objects)				
54	0.073	0.001	0.073	0.001	(method 'send' of '_socket.socket' objects)				

## 0.6 Debugging Screenshots



```
main.c:158:24: warning: format '%s' expects argument of type 'char *', but argument 2 has type 'int' [-Wformat=]
main.c:158:17: warning: too many arguments for format [-Wformat-extra-args]
main.c:250:13: warning: format '%s' expects argument of type 'char *', but argument 2 has type 'char (*)[20]' [-Wformat=]
Reading symbols from a.out...
(gdb) break 146
Breakpoint 2 at 0x17e0: file main.c, line 146.
(gdb) break 157
Breakpoint 4 at 0x1835: file main.c, line 157.
(gdb) r
Starting program: /home/a.out
----- WELCOME TO HOTEL RAJMAHAL-----
what would you like to do today?
1. Room Booking
2. Food Order
3. Room Cancellation
4. Room Info
5. Search customer
6. Feedback
7. Exit
Enter your choice:1
Breakpoint 2, RoomBooking () at main.c:63
63 {
(gdb) c
Continuing.
----ROOM BOOKING----
Enter your Name:
himi
Enter your Phone No.:
555
Enter your Address:
hhh
enter room number
5
Room booked successfully

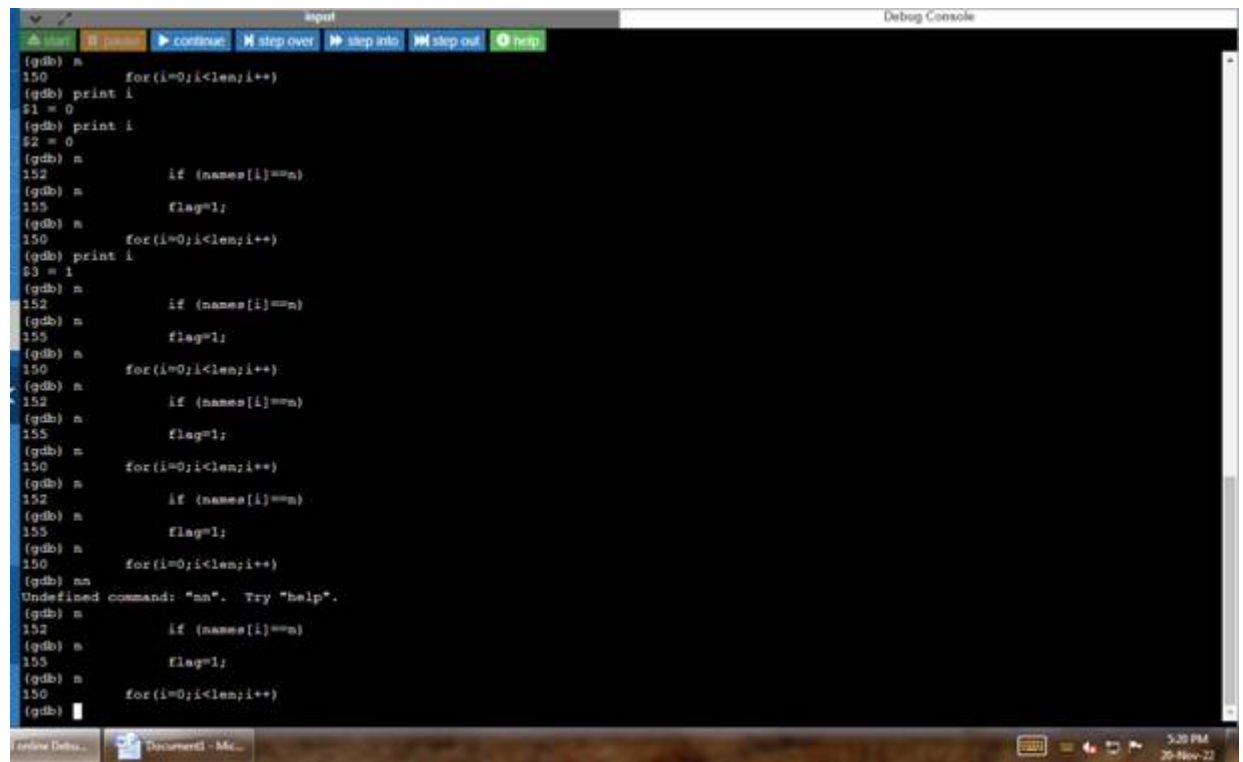
----- WELCOME TO HOTEL RAJMAHAL-----
what would you like to do today?
1. Room Booking
```



```
Room booked successfully

----- WELCOME TO HOTEL RAJMAHAL-----
what would you like to do today?
1. Room Booking
2. Food Order
3. Room Cancellation
4. Room Info
5. Search customer
6. Feedback
7. Exit
Enter your choice:5
Breakpoint 3, Search () at main.c:146
146 printf("Enter your Name:");
(gdb) n
147 scanf("%s",n);
(gdb) n
Enter your Name:himi
148 int len=(sizeof(names))/(sizeof(char));
(gdb) n
149 for(i=0;i<len;i++)
150 if (names[i]==n)
151 flag=1;
(gdb) n
152 for(i=0;i<len;i++)
153 print i
$1 = 0
(gdb) print i
$2 = 0
(gdb) n
154 if (names[i]==n)
155 flag=1;
(gdb) n
156 for(i=0;i<len;i++)
157 print i
$3 = 1
```





```
(gdb) n
150     for(i=0;i<len;i++)
(gdb) print i
$1 = 0
(gdb) print i
$2 = 0
(gdb) n
152     if (names[i]==n)
(gdb) n
155     flag=1;
(gdb) n
150     for(i=0;i<len;i++)
(gdb) print i
$3 = 1
(gdb) n
152     if (names[i]==n)
(gdb) n
155     flag=1;
(gdb) n
150     for(i=0;i<len;i++)
(gdb) n
152     if (names[i]==n)
(gdb) n
155     flag=1;
(gdb) n
150     for(i=0;i<len;i++)
(gdb) n
152     if (names[i]==n)
(gdb) n
155     flag=1;
(gdb) n
150     for(i=0;i<len;i++)
(gdb) nn
Undefined command: "nn". Try "help".
(gdb) n
152     if (names[i]==n)
(gdb) n
155     flag=1;
(gdb) n
150     for(i=0;i<len;i++)
(gdb) 
```