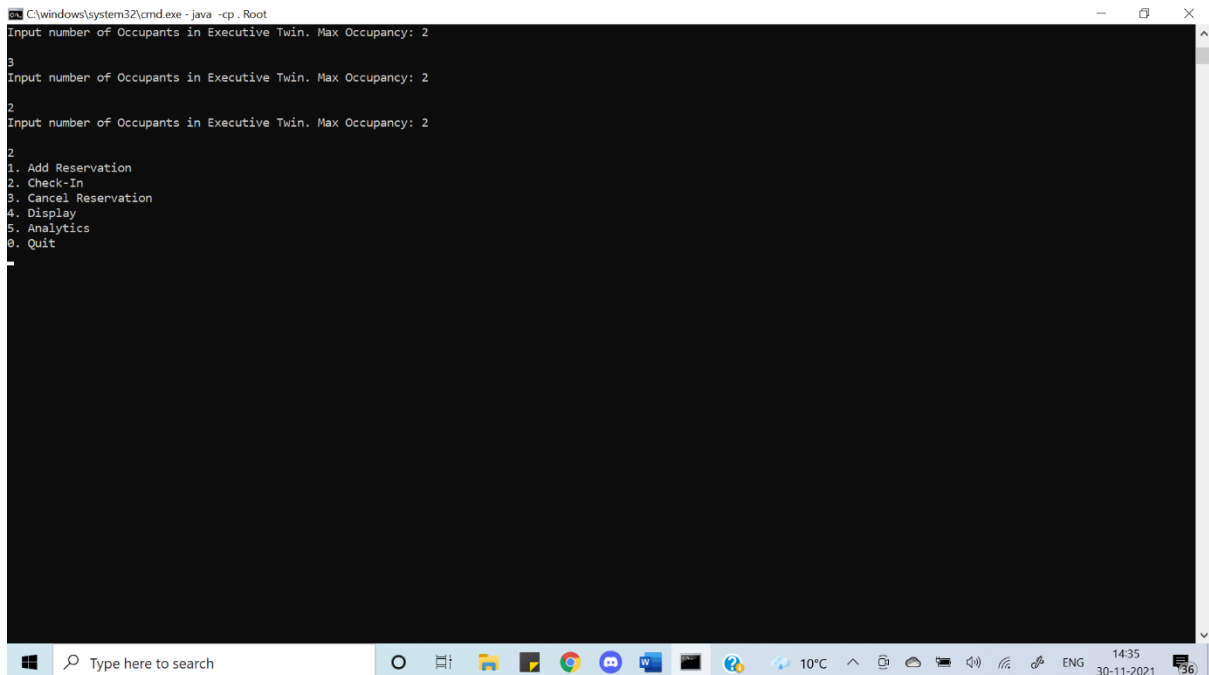


TESTING

Best Solutions have done extensive testing on the hotel reservation system it made for the L4 Group of hotels. Below are the test cases and evidence of them working. We have not performed any unit testing this is just command line testing in real sicario.

Test Case 1

Add Reservation

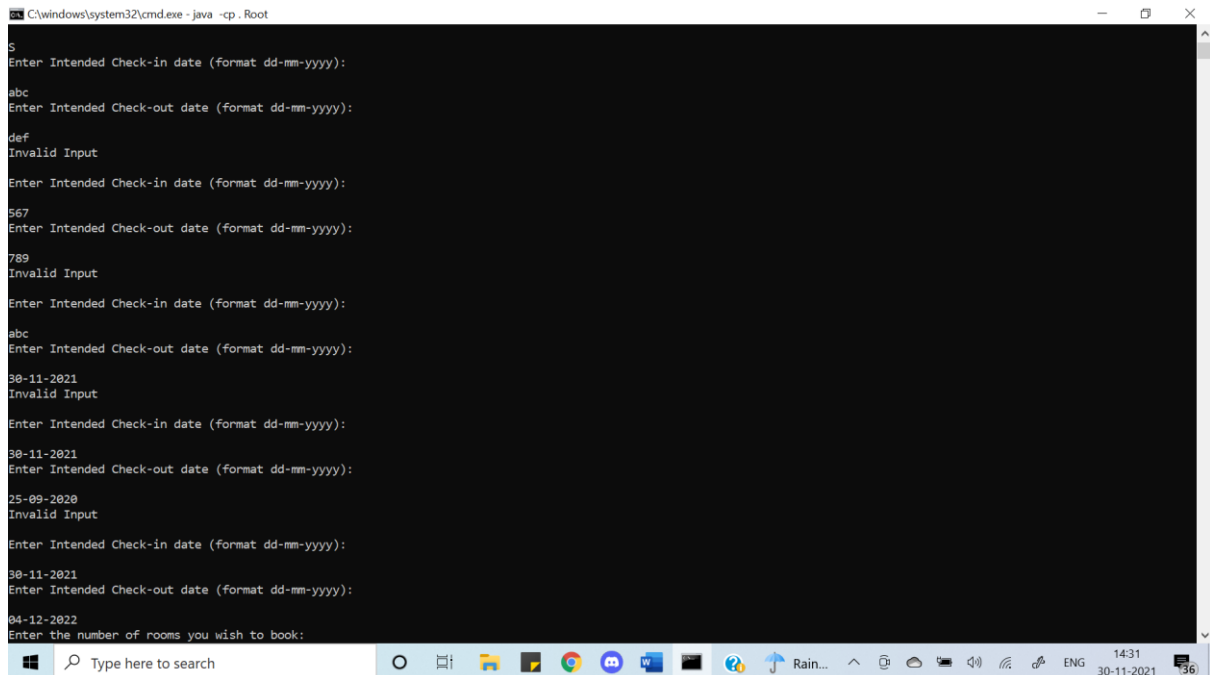


```
C:\windows\system32\cmd.exe - java -cp .Root
Input number of Occupants in Executive Twin. Max Occupancy: 2
3
Input number of Occupants in Executive Twin. Max Occupancy: 2
2
Input number of Occupants in Executive Twin. Max Occupancy: 2
2
1. Add Reservation
2. Check-In
3. Cancel Reservation
4. Display
5. Analytics
0. Quit
```

Notice as nothing is printed after the Add Reservation command ends so the Reservation has been successfully added

Test Case 2

Date Format

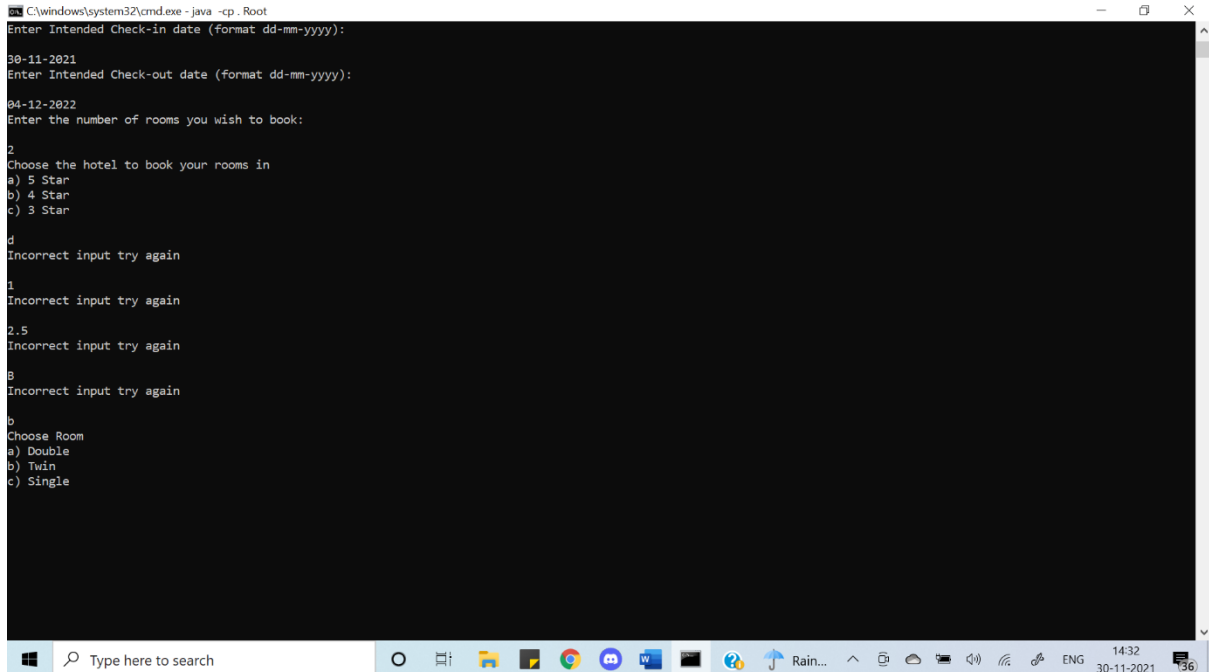


```
C:\windows\system32\cmd.exe - java -cp . Root
S
Enter Intended Check-in date (format dd-mm-yyyy):
abc
Enter Intended Check-out date (format dd-mm-yyyy):
def
Invalid Input
Enter Intended Check-in date (format dd-mm-yyyy):
567
Enter Intended Check-out date (format dd-mm-yyyy):
789
Invalid Input
Enter Intended Check-in date (format dd-mm-yyyy):
abc
Enter Intended Check-out date (format dd-mm-yyyy):
30-11-2021
Invalid Input
Enter Intended Check-in date (format dd-mm-yyyy):
30-11-2021
Enter Intended Check-out date (format dd-mm-yyyy):
25-09-2020
Invalid Input
Enter Intended Check-in date (format dd-mm-yyyy):
30-11-2021
Enter Intended Check-out date (format dd-mm-yyyy):
04-12-2022
Enter the number of rooms you wish to book:
```

Notice how it says Invalid Input if the format is not followed. Also, you can notice that if the program detects that the Check Out date is less than the Check In date it still says Invalid Input. The same logic applies while you enter the dates to look for in the Analytics part.

Test Case 3

Hotel Type



```
C:\windows\system32\cmd.exe - java -cp . Root
Enter Intended Check-in date (format dd-mm-yyyy):
30-11-2021
Enter Intended Check-out date (format dd-mm-yyyy):
04-12-2022
Enter the number of rooms you wish to book:
2
Choose the hotel to book your rooms in
a) 5 Star
b) 4 Star
c) 3 Star
d
Incorrect input try again
1
Incorrect input try again
2.5
Incorrect input try again
8
Incorrect input try again
b
Choose Room
a) Double
b) Twin
c) Single
```

See how it asks you to input again and again till you get the input type right

Test Case 4

Room Type

```
C:\windows\system32\cmd.exe - java -cp . Root
Choose the hotel to book your rooms in
a) 5 Star
b) 4 Star
c) 3 Star
d
Incorrect input try again
1
Incorrect input try again
2,5
Incorrect input try again
B
Incorrect input try again
b
Choose Room
a) Double
b) Twin
c) Single
d
Incorrect input try again
1
Incorrect input try again
2,5
Incorrect input try again
B
Incorrect input try again
b
Choose Room
a) Double
b) Twin
c) Single
d
Input number of Occupants in Executive Twin. Max Occupancy: 2
```

See how it asks you to input again and again till you get the input type right

Test Case 5

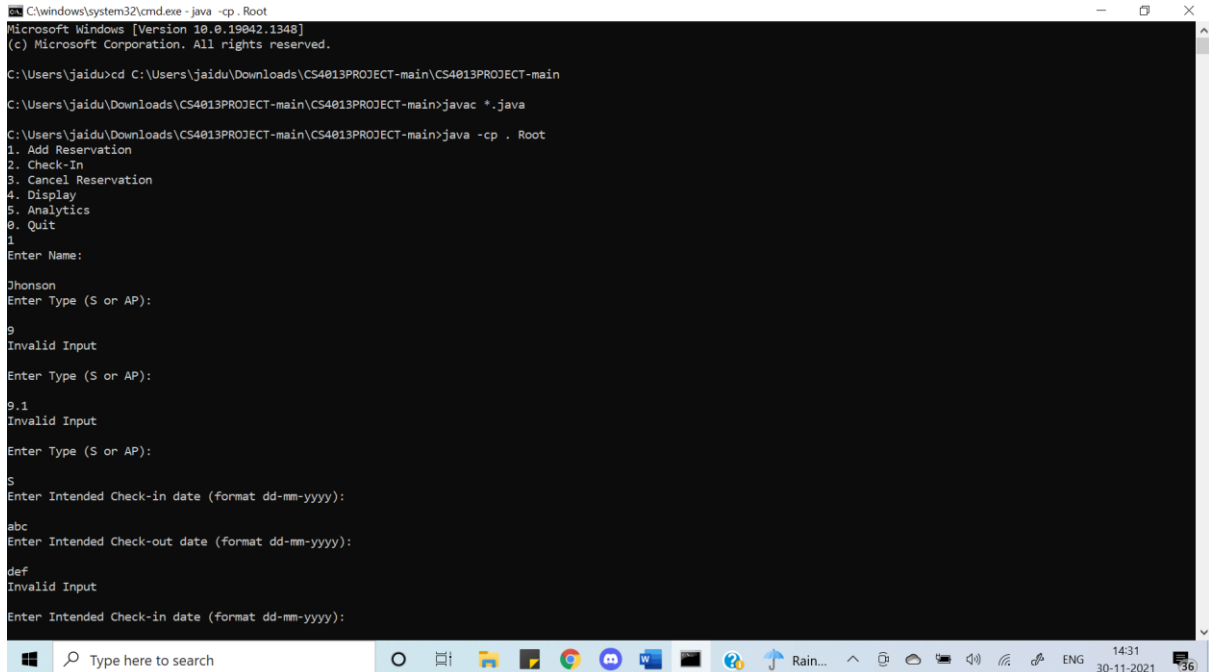
Room Occupancy

```
C:\windows\system32\cmd.exe - java -cp . Root
Choose Room
a) Double
b) Twin
c) Single
d
Incorrect input try again
1
Incorrect input try again
2.5
Incorrect input try again
8
Incorrect input try again
b
Choose Room
a) Double
b) Twin
c) Single
b
Input number of Occupants in Executive Twin. Max Occupancy: 2
3
Input number of Occupants in Executive Twin. Max Occupancy: 2
2
Input number of Occupants in Executive Twin. Max Occupancy: 2
2
1. Add Reservation
2. Check-In
3. Cancel Reservation
4. Display
5. Analytics
0. Quit
```

See how it asks you to input again and again till you enter the occupancy less than or equal to the maximum occupancy.

Test Case 6

Reservation Type



```
C:\windows\system32\cmd.exe - java -cp . Root
Microsoft Windows [Version 10.0.19042.1348]
(c) Microsoft Corporation. All rights reserved.

C:\Users\jaidu>cd C:\Users\jaidu\Downloads\CS4013PROJECT-main\CS4013PROJECT-main
C:\Users\jaidu\Downloads\CS4013PROJECT-main\CS4013PROJECT-main>javac *.java
C:\Users\jaidu\Downloads\CS4013PROJECT-main\CS4013PROJECT-main>java -cp . Root
1. Add Reservation
2. Check-In
3. Cancel Reservation
4. Display
5. Analytics
0. Quit
1
Enter Name:
Jhonson
Enter Type (S or AP):
9
Invalid Input
Enter Type (S or AP):
9,1
Invalid Input
Enter Type (S or AP):
S
Enter Intended Check-in date (format dd-mm-yyyy):
abc
Enter Intended Check-out date (format dd-mm-yyyy):
def
Invalid Input
Enter Intended Check-in date (format dd-mm-yyyy):
```

See how it says Invalid input if you enter anything apart from “S” or “AP”

Test Case 7

Check-In

```
C:\windows\system32\cmd.exe - java -cp . Root
1. Add Reservation
2. Check-In
3. Cancel Reservation
4. Display
5. Analytics
0. Quit
2
Jhonson has successfully checked in for reservation number: 7
1. Add Reservation
2. Check-In
3. Cancel Reservation
4. Display
5. Analytics
0. Quit
```

```
C:\windows\system32\cmd.exe - java -cp . Root
1. Add Reservation
2. Check-In
3. Cancel Reservation
4. Display
5. Analytics
0. Quit
2
No Reservations found for today
1. Add Reservation
2. Check-In
3. Cancel Reservation
4. Display
5. Analytics
0. Quit
```

See how it checked in “Jhonson” as his intended Check in date is for 30/11/2021 and the date today is 30/11/2021 but then if you delete this reservation there are still other reservations but now if you try to check in it will not let you as none of the other reservations are for 30/11/2021

Test Case 8

Cancel Reservation

```
C:\windows\system32\cmd.exe - java -cp . Root
1. Add Reservation
2. Check-In
3. Cancel Reservation
4. Display
5. Analytics
0. Quit
3
Enter the Reservation number of the Reservation you want to cancellation:
7
Same day
Not Applicable for refund as it is less than 2 days til reservation date or reservation was an advanced purchase
Removed reservation number: 7
1. Add Reservation
2. Check-In
3. Cancel Reservation
4. Display
5. Analytics
0. Quit
3
Enter the Reservation number of the Reservation you want to cancellation:
6
Not Applicable for refund as it is less than 2 days til reservation date or reservation was an advanced purchase
Removed reservation number: 6
1. Add Reservation
2. Check-In
3. Cancel Reservation
4. Display
5. Analytics
0. Quit
4
Reservation Number: 1

C:\windows\system32\cmd.exe - java -cp . Root
1. Add Reservation
2. Check-In
3. Cancel Reservation
4. Display
5. Analytics
0. Quit
3
Enter the Reservation number of the Reservation you want to cancellation:
4
Cost Refunded
Removed reservation number: 4
1. Add Reservation
2. Check-In
3. Cancel Reservation
4. Display
5. Analytics
0. Quit
1
```

Note how the refund is initiated only if Reservation was of type "S" or it is more than 2 days before cancellation

Test Case 9

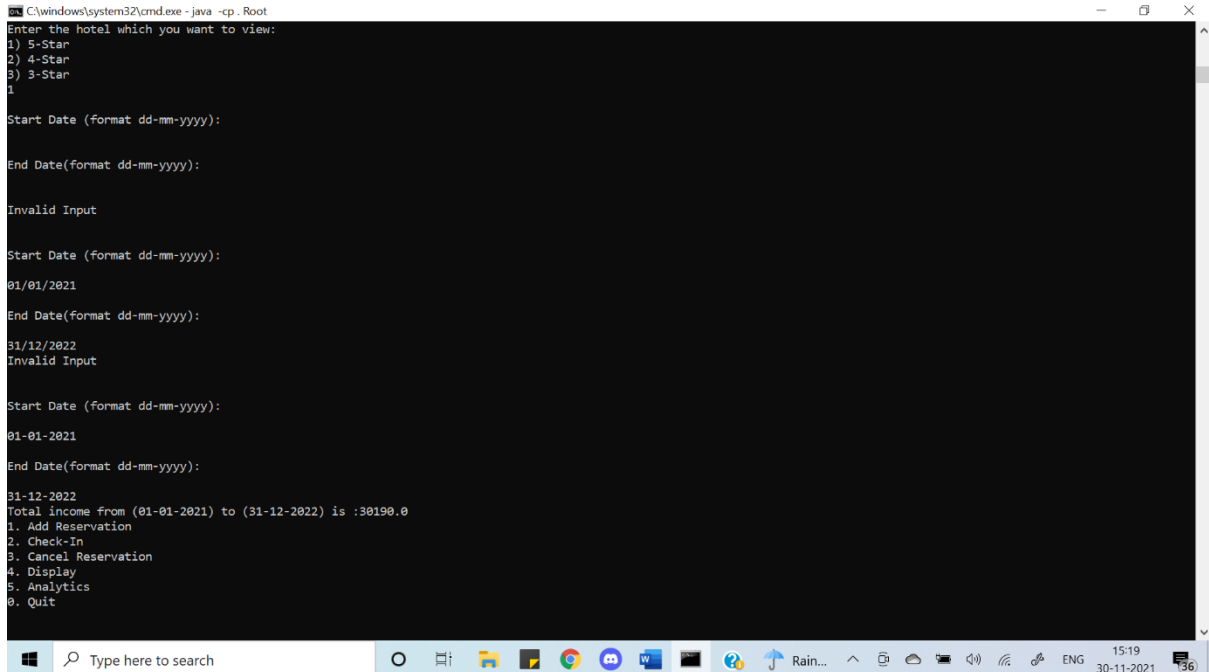
Display

[illegible]

This is just used to display all the reservation information

Test Case 10

Analytics



```
C:\windows\system32\cmd.exe - java -cp . Root
Enter the hotel which you want to view:
1) 5-Star
2) 4-Star
3) 3-Star
1

Start Date (format dd-mm-yyyy):

End Date(format dd-mm-yyyy):

Invalid Input

Start Date (format dd-mm-yyyy):
01/01/2021

End Date(format dd-mm-yyyy):
31/12/2022
Invalid Input

Start Date (format dd-mm-yyyy):
01-01-2021

End Date(format dd-mm-yyyy):
31-12-2022
Total income from (01-01-2021) to (31-12-2022) is :30190.0
1. Add Reservation
2. Check-In
3. Cancel Reservation
4. Display
5. Analytics
0. Quit
```

Notice it simply prints out the income correctly which means that that analysis is correct

Test Case 11

Income

```
C:\windows\system32\cmd.exe - java -cp . Root
Enter the hotel which you want to view:
1) 5-Star
2) 4-Star
3) 3-Star
1

Start Date (format dd-mm-yyyy):

End Date(format dd-mm-yyyy):

Invalid Input

Start Date (format dd-mm-yyyy):
01/01/2021

End Date(format dd-mm-yyyy):
31/12/2022
Invalid Input

Start Date (format dd-mm-yyyy):
01-01-2021

End Date(format dd-mm-yyyy):
31-12-2022
Total income from (01-01-2021) to (31-12-2022) is :30190.0
1. Add Reservation
2. Check-In
3. Cancel Reservation
4. Display
5. Analytics
0. Quit
```

This displays the date income a particular hotel type made in the given date ranges

Test Case 12

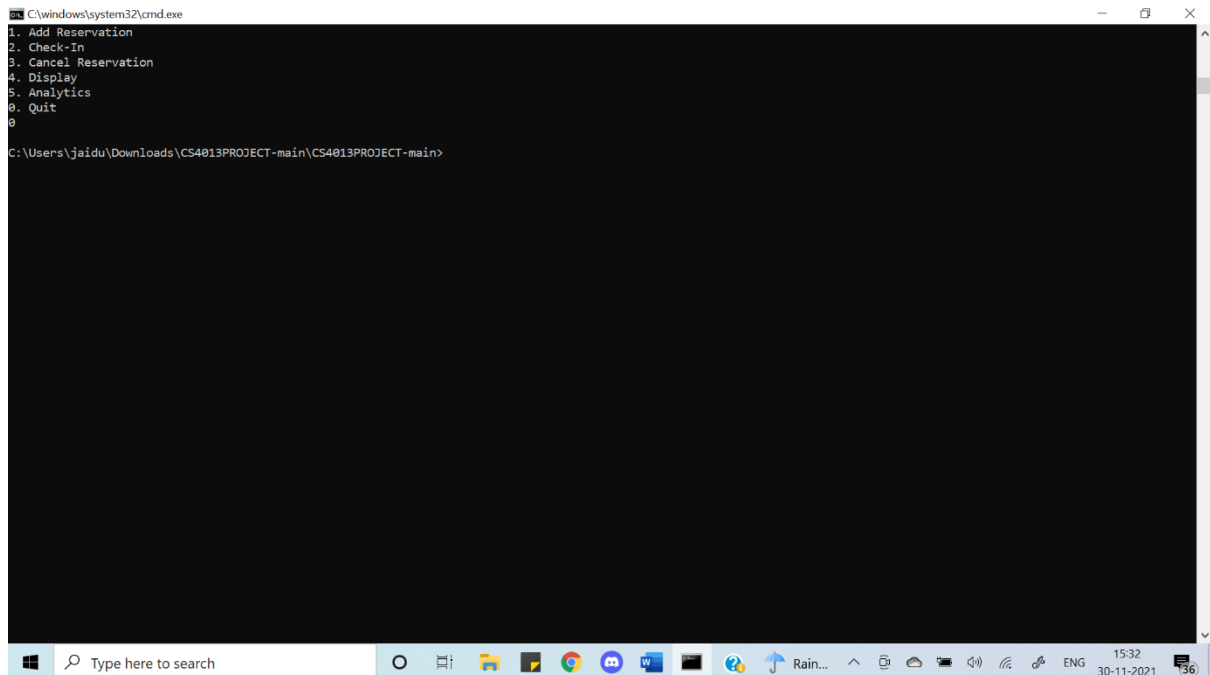
Hotel Occupancy

```
C:\windows\system32\cmd.exe - java -cp . Root
1. Add Reservation
2. Check-In
3. Cancel Reservation
4. Display
5. Analytics
0. Quit
5
Check the analytics for
1) Income
2) Occupancy
2
Enter the hotel which you want to view:
1) 5-Star
2) 4-Star
3) 3-Star
2
Start Date (format dd-mm-yyyy):
End Date(format dd-mm-yyyy):
Invalid Input
Start Date (format dd-mm-yyyy):
01-01-2021
End Date(format dd-mm-yyyy):
05-01-2021
Total Occupancy from (01-01-2021) to (05-01-2021) is :0
1. Add Reservation
2. Check-In
3. Cancel Reservation
4. Display
5. Analytics
0. Quit
```

See how there are no rooms reserved in the given dates ranges in the given hotel type so the Total Occupancy is 0.

Test Case 13

Quit



```
C:\windows\system32\cmd.exe
1. Add Reservation
2. Check-In
3. Cancel Reservation
4. Display
5. Analytics
6. Quit
0
C:\Users\jaidu\Downloads\CS4013PROJECT-main\CS4013PROJECT-main>
```

The screenshot shows a Windows command prompt window. The title bar reads 'C:\windows\system32\cmd.exe'. The command prompt displays a menu with the following options: 1. Add Reservation, 2. Check-In, 3. Cancel Reservation, 4. Display, 5. Analytics, 6. Quit, and 0. The option '6. Quit' is highlighted. Below the menu, the current directory is shown as 'C:\Users\jaidu\Downloads\CS4013PROJECT-main\CS4013PROJECT-main>'. The Windows taskbar is visible at the bottom, showing the search bar, task view button, and several application icons including File Explorer, Google Chrome, and Microsoft Word. The system tray on the right shows the date and time as '15:32 30-11-2021'.

This simply quits the program by breaking the loop

Test Case 14

Room Not Available for Reservation

```
C:\windows\system32\cmd.exe - java -cp . Root
1. Add Reservation
2. Check-In
3. Cancel Reservation
4. Display
5. Analytics
0. Quit
4
Reservation Number: 1
Reservation Name: Dan
Type: S
Duration of stay: 25-12-2021 -> 26-12-2021
Number of Rooms: 1 Rooms: Deluxe Single

Reservation Number: 2
Reservation Name: Jeff
Type: S
Duration of stay: 01-01-2022 -> 31-01-2022
Number of Rooms: 10 Rooms: Deluxe Family/Deluxe Family/Deluxe Family/Deluxe Family/Deluxe Family/Deluxe Family/Deluxe Family/Deluxe Family/Deluxe Family/Deluxe Family

Reservation Number: 3
Reservation Name: Jack
Type: S
Duration of stay: 02-02-2022 -> 05-02-2022
Number of Rooms: 3 Rooms: Deluxe Double/Deluxe Twin/Deluxe Single

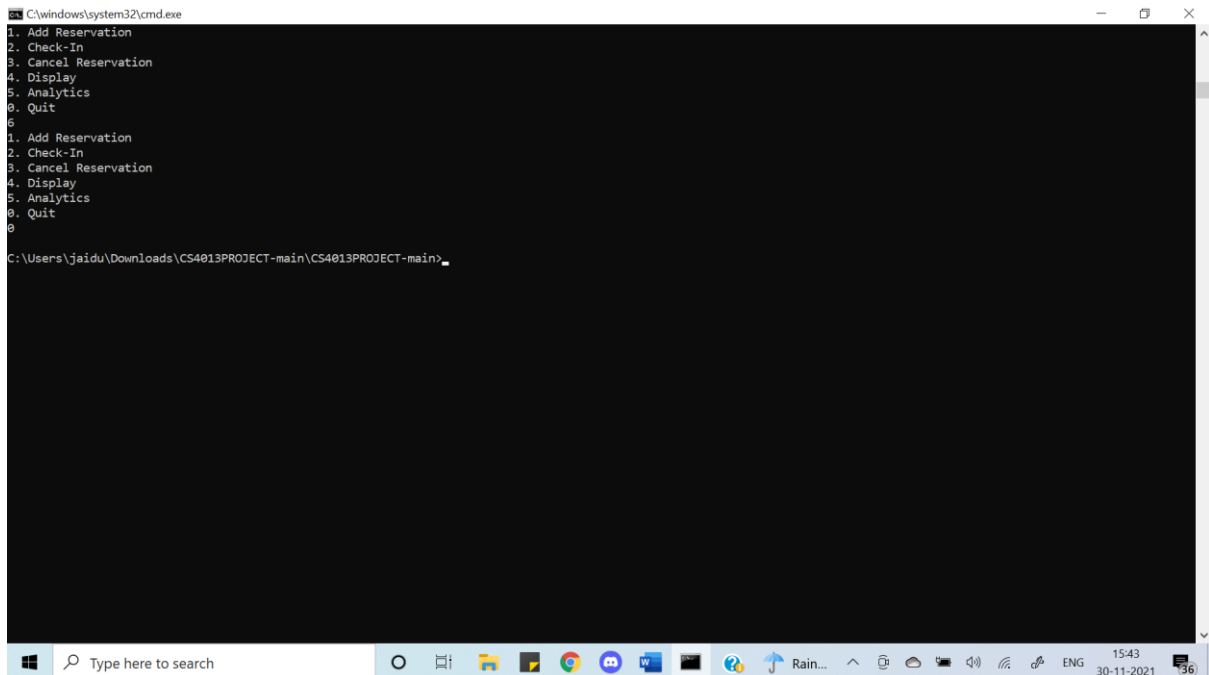
1. Add Reservation
2. Check-In
3. Cancel Reservation
4. Display
5. Analytics
0. Quit
1
Enter Name:
James
Enter Type (S or AP):
01-01-2022

C:\windows\system32\cmd.exe - java -cp . Root
Invalid Input
Enter Type (S or AP):
S
Enter Intended Check-in date (format dd-mm-yyyy):
01-01-2022
Enter Intended Check-out date (format dd-mm-yyyy):
05-01-2022
Enter the number of rooms you wish to book:
1
Choose the hotel to book your rooms in
a) 5 Star
b) 4 Star
c) 3 Star
a
Choose Room
a) Double
b) Twin
c) Single
d) Family
d
Maximum number of rooms exceeded
1. Add Reservation
2. Check-In
3. Cancel Reservation
4. Display
5. Analytics
0. Quit
```

See how the given room type for the hotel type for the particular date is not available as all of them are booked hence reservation cannot be made

Test Case 15

Main Input Method



```
C:\windows\system32\cmd.exe
1. Add Reservation
2. Check-In
3. Cancel Reservation
4. Display
5. Analytics
0. Quit
0
1. Add Reservation
2. Check-In
3. Cancel Reservation
4. Display
5. Analytics
0. Quit
0
C:\Users\jaidu\Downloads\CS4013PROJECT-main\CS4013PROJECT-main>
```

This tests that if the main input method is given any other integer than the ones specified it asks you to enter your choice again.