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**COURSE: PROGRAMMING TECHNIQUE I (SECJ)**

**ASSIGNMENT I**

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| **MODULE / SECTION** | SECJ 1013 / 08 |
| **ASSIGNMENT TYPE** | GROUP |
| **TITLE OF ASSIGNMENT** | Hotel Management |
| **CASE STUDY** | Case Study 11 |
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Case study 11

Create a pseudocode based on the Hotel Room payment system restricted to below conditions

• The user will insert the number of guest hotel. Then the age of each guest. The input must be round numbers, not negatives. If the age is more than 15 years old then it is considered adult guests.

• Then the user must choose which room that he/she prefers based on Room ID on table below. Any other input will not be accepted

|  |  |  |  |
| --- | --- | --- | --- |
| Room ID | Room Name | Price (RM)/night | Room Load |
| 1 | Apple | 300.00 | Max adult:1 Max Children:1 |
| 2 | Honey Dew | 510.00 | Max adult:3 Max Children:3 |
| 3 | Mango | 450.00 | Max adult:2 Max Children:3 |
| 4 | Rose | 330.00 | Max adult:1 Max Children:2 |
| 5 | Hibiscus | 750.00 | Max adult:4 Max Children:5 |

**Table 9**: Hotel Price List

• If the Room Id load is less than the number of adult and children load, then the system will not allow for room reservation.

• Then the user will have to input the number of nights. The input must be round numbers, not negatives

• Lastly the system will display the total amount of room payment which include the total payment plus tax (6% of total payment) plus RM100/guest in one night as deposits (For example the user input 3 adult guest, 2 children guest and pick Honey Dew for 3 night, therefore the deposits is 5xRM100x3nights=RM1500)

ANSWER

1. Start

2. Display "Enter the number of guests : "

3. Declare integer number\_of\_guests

4. Read number\_of\_guests

5. if (number\_of\_guests <= 0)

5.1 Display "Number of guests entered is invalid."

5.2 Display "Enter the number of guests : "

5.3 Read number\_of\_guests

6. End if

7. Declare an array of integer of age\_of\_guests with the size of number\_of\_guests

8. Set integer i=0, number\_of\_adult=0, number\_of\_children=0

9. While(i < number\_of\_guests)

9.1 Display "Enter the age of guests : "

9.2 Read age\_of\_guests and store in the array of age\_of\_guests

9.3 if (age\_of\_guests < 0)

9.3.1 Display "Age is invalid."

9.3.2 Go to Step 9

9.4 else

9.4.1 if (age\_of\_guests > 15)

9.4.1.1 number\_of\_adult = number\_of\_adult +1

9.4.1.2 go to step 9.4.3

9.4.2 else

9.4.2.1 number\_of\_children = number\_of\_children +1

9.4.2.2 go to step 9.4.3

9.4.3 i=i+1

9.4.4 end if

9.5 end if

10. End while

11. Set integer j=1

12. Declare integer RoomID and double\_price\_per\_night

13. While (j==1)

13.1 j=j-1

13.2 Display "Enter RoomID : "

13.3 Read RoomID

13.4 If (RoomID < 1 || RoomID > 5)

13.4.1 Display "RoomID is invalid."

13.4.2 Display "Enter RoomID : "

13.4.3 Read RoomID

13.5 End if

13.6 if ( RoomID == 1)

13.6.1 if (number\_of\_adult <= 1 && number\_of\_children <= 1)

13.6.1.1 Set price\_per\_night = 300.00

13.6.1.2 go to step 13.6.3

13.6.2 else

13.6.2.1 Display "Room reservation is not allowed."

13.6.2.2 j=j+1

13.6.2.3 go to step 13.6.3

13.6.3 end if

13.7 end if

13.8 if ( RoomID == 2)

13.8.1 if (number\_of\_adult <= 3 && number\_of\_children <= 3)

13.8.1.1 Set price\_per\_night = 510.00

13.8.1.2 go to step 13.8.3

13.8.2 else

13.8.2.1 Display "Room reservation is not allowed."

13.8.2.2 j=j+1

13.8.2.3 go to step 13.8.3

13.8.3 end if

13.9 end if

13.10 if ( RoomID == 3)

13.10.1 if (number\_of\_adult <= 2 && number\_of\_children <= 3)

13.10.1.1 Set price\_per\_night = 450.00

13.10.1.2 go to step 13.10.3

13.10.2 else

13.10.2.1 Display "Room reservation is not allowed."

13.10.2.2 j=j+1

13.10.2.3 go to step 13.10.3

13.10.3 end if

13.11 end if

13.12 if ( RoomID == 4)

13.12.1 if (number\_of\_adult <= 1 && number\_of\_children <= 2)

13.12.1.1 Set price\_per\_night = 330.00

13.12.1.2 go to step 13.12.3

13.12.2 else

13.12.2.1 Display "Room reservation is not allowed."

13.12.2.2 j=j+1

13.12.2.3 go to step 13.12.3

13.12.3 end if

13.13 end if

13.14 if ( RoomID == 5)

13.14.1 if (number\_of\_adult <= 4 && number\_of\_children <= 5)

13.14.1.1 Set price\_per\_night = 750.00

13.14.1.2 go to step 13.14.3

13.14.2 else

13.14.2.1 Display "Room reservation is not allowed."

13.14.2.2 j=j+1

13.14.2.3 go to step 13.14.3

13.14.3 end if

13.15 end if

14. End while

15. Display "Enter the number of nights : "

16. Declare integer number\_of\_nights

17. Read number of nights

18. If ( number of nights < 0)

18.1 Display "Number of nights entered is invalid."

18.2 Display "Enter the number of nights : "

18.3 Read number\_of\_nights

19. End if

20. Declare double total\_payment, deposit, total\_amount\_of\_room\_payment

21. Calculate total\_payment =

price\_per\_night \* number\_of\_nights

1. Calculate deposit =

100 \* number\_of\_guests \* number\_of\_nights

1. Calculate total amount of room payment =

total\_payment + total\_payment \* 0.06 + deposit

24. Display "The total amount of room payment is : RM"

25. Display total\_amount\_of\_room\_payment

26. End