



CSE110: Programming Language I (Lab)
Fall 2025
Lab Exam - 01
Duration: 25 Minutes

A

Name: Amitrakshar Biswas ID: 1000058970 Section: 19

Question 1 [C01] [10 Points]

Write a java program to solve the following. A hotel has two room types: Studio and Apartment. The price per night depends on the month number (1 = January, 5 = May, etc.)

Month Number	Month Name	Studio(USD)	Apartment(USD)
5	May	50	65
6	June	75	69
7	July	76	77
8	August	76	77
9	September	75	69
10	October	50	65

implementation ↗
 $a = 65 * n ; s = 50 * n ;$
TIP: Instead of
 $s = 50 * n ; a = 65 * n ;$
so, don't get confused

Only these 6 months are valid. No need to handle any other month number.

If more than 14 nights:

Month(s)	Studio Discount	Apartment Discount
May or October (5/10)	30% off	10% off
June or September (6/9)	20% off	10% off
July or August (7/8)	No discount	10% off

Input	Output
Enter month: 5 Enter Total Nights: 15	Apartment: 877.5 USD. Studio: 525.0 USD.
Enter month: 8 Enter Total Nights: 13	Apartment: 1001.0 USD. Studio: 988.0 USD.

```
import java.util.Scanner;  
public class q1 {  
    public static void main(String[] args) {  
        Scanner sc = new Scanner(System.in);  
        System.out.print("Enter month: ");  
        int month = sc.nextInt();  
        System.out.print("Enter Total Nights: ");  
        int nights = sc.nextInt();  
  
        double a = s = 0; // a=apartment , s=studio  
        if (month == 5) {a = 65 * nights; s = 50 * nights;}  
        else if (month == 6) {a = 69 * nights; s = 75 * nights;}  
        else if (month == 7) {a = 77 * nights; s = 76 * nights;}  
        else if (month == 8) {a = 77 * nights; s = 76 * nights;}  
        else if (month == 9) {a = 69 * nights; s = 75 * nights;}  
        else if (month == 10) {a = 65 * nights; s = 50 * nights;}  
        if (nights > 14) {  
            if (month == 5 || month == 10) {s *= 0.7; a *= 0.9};  
            else if (month == 6 || month == 9) {s *= 0.8; a *= 0.9};  
            else if (month == 7 || month == 8) {s *= 1.0; a *= 0.9};  
        }  
        System.out.println("Apartment: " + a + " USD");  
        System.out.println("Studio : " + s + " USD");  
    } // public class q1.
```