Assignment #20

# Hotel Room and Cost

The task is to get the details of the hotel room and display the final cost of the room using a menu driven application.

Write a Java program to implement this task.

 Create a class **HotelRoom**

Include the following protected data members / attributes:

* hotelName – of type String
* numberOfSqFeet – of type Integer
* hasTV - of type Boolean
* hasWifi – of type Boolean

Include the following public methods :

* Create a constructor that initializes all the data members
* public HotelRoom(String hotelName,Integer numberOfSqFeet,Boolean hasTV,Boolean hasWifi)
* "calculateTariff" – Calculates cost using the number of sq feets and cost per sq feet and returns an Integer
* "getRatePerSqFeet" - This method returns an Integer. In this case, it always returns 0

Create a class **DeluxeRoom** that extends **HotelRoom**

Include the following protected attributes / data members:

* ratePerSqFeet – of type Integer.

Include the following public methods :

* Include a constructor that sets ratePerSqFeet as 10.
* public HotelRoom(String hotelName,Integer numberOfSqFeet,Boolean hasTV,Boolean hasWifi)
* "getRatePerSqFeet" – returns (ratePerSqFeet + 2) if wifi is present, else returns ratePerSqFeet.

Create a class **DeluxeACRoom** that extends DeluxeRoom

Include the following public methods:

* Include a constructor that sets ratePerSqFeet as 12.

Create a class **SuiteACRoom** that extends HotelRoom

Include the following private attributes / data members:

* ratePerSqFeet – of type Integer.

Include the following public methods :

* Include a constructor that sets ratePerSqFeet as 15.
* public HotelRoom(String hotelName,Integer numberOfSqFeet,Boolean hasTV,Boolean hasWifi)
* getRatePerSqFeet – returns (ratePerSqFeet + 2) if wifi is present, else returns ratePerSqFeet.

Create a Main class to test the above classes.

**Sample Input Output 1:**

Hotel Tariff Calculator

1. Deluxe Room
2. Deluxe AC Room
3. Suite AC Room

Select Room Type:

**1**

Hotel Name:

**Taj**

Room Square Feet Area:

**3200**

Room has TV (yes/no):

**yes**

Room has Wifi (yes/no:

**yes**

Room Tariff per day is: 38400