1. Problem Statement

We want to estimate the cost of painting a property.

Interior wall painting cost is Rs.18 per sq.ft. and exterior wall painting cost is Rs.12 per sq.ft.

Take input as

1. Number of Interior walls

2. Number of Exterior walls

3. Surface Area of each Interior Wall in units of square feet

4. Surface Area of each Exterior Wall in units of square feet

If a user enters zero as the number of walls then skip Surface area values as User may don't want to paint that wall.

Calculate and display the total cost of painting the property

2. Problem Statement

A washing machine works on the principle of Fuzzy System, the weight of clothes put inside it for washing is uncertain But based on weight measured by sensors, it decides time and water level which can be changed by menus given on the machine control area.

For low level water, the time estimate is 25 minutes, where approximately weight is between 2000 grams or any nonzero positive number below that.

For medium level water, the time estimate is 35 minutes, where approximately weight is between 2001 grams and 4000 grams.

For high level water, the time estimate is 45 minutes, where approximately weight is above 4000 grams.

Assume the capacity of machine is maximum 7000 grams where approximately weight is zero, time estimate is 0 minutes.

Write a program which takes a numeric weight in the range [0,7000] as input and produces estimated time as output is: "OVERLOADED", and for all other inputs, the output statement is "INVALID INPUT".

 Input should be in the form of integer value –

Output must have the following format –

Time Estimated: Minutes

3. Problem Statement

A doctor has a clinic where he serves his patients. The doctor's consultation fees are different for different groups of patients depending on their age.

If the patient's age is below 17, fees is 200 INR.

If the patient's age is between 17 and 40, fees is 400 INR.

If patient's age is above 40, fees is 300 INR.

Write a code to calculate earnings in a day for which one array/List of values representing age of patients visited on that day is passed as input.

Note:

• Age should not be zero or less than zero or above 120

• Doctor consults a maximum of 20 patients a day

4. Problem Statement –

Write a program to calculate the fuel consumption of your truck.The program should ask the user to enter the quantity of diesel to fill up the tank and the distance covered till the tank goes dry.

Calculate the fuel consumption and display it in the format (liters per 100 kilometers). Convert the same result to the U.S. style of miles per gallon and display the result.

If the quantity or distance is zero or negative display " is an Invalid Input".

Note: The US approach of fuel consumption calculation (distance / fuel) is the inverse of the European approach (fuel / distance). Also note that 1 kilometer is 0.6214 miles, and 1 liter is 0.2642 gallons.

The result should be with two decimal place.

To get two decimal place refer the below-mentioned print statement :

float cost=670.23;

System.out.printf("You need a sum of Rs.%.2f to cover the trip",cost);

5. Problem Statement –

 Vohra went to a movie with his friends in a Wave theatre and during break time he bought pizzas, puffs and cool drinks.

 Consider the following prices :

• Rs.100/pizza

• Rs.20/puffs

• Rs.10/cooldrink

Generate a bill for What Vohra has bought.