Daniel McGarry

Professor Eckert

CS-176L

1/25/2022

House Painting Algorithm

**INPUTS:**

Input painter cost per square foot as costPerSqFt

Input length of house as lengthOfHouse

Input width of house as widthOfHouse

Input height of house as heightOfHouse

Input number of windows as numberOfWindows

Input length of a window as lengthOfWindow

Input width of a window as widthOfWindow

Input number of doors as numberOfDoors

Input length of a door as lengthOfDoor

Input width of a door as widthOfDoor

**CALCULATIONS:**

Find total square footage of all peak sides(double sqftPeak) of the house by multiplying the width and length of the house, adding 0.5, subtract the height of the house and the width of the house, and then finally combing that with the length of the house again and then combine the two separate results you get by multiplying.

Find total square footage of all normal sides(double sqftNormal) of the house by multiplying the length of the house and the width of the house.

Find the total surface area(double totalSurfaceArea) by multiplying “sqftPeak” by 2 as well as “sqftNormal” by 2.

Find the official total square footage (double totalSurfaceAreaFinal) by combing the product of the total square footage of the dimensions of each individual window, finding the product of the total square footage you will get from combing all of the dimensions from each individual door, and then adding the total square footage from all of the windows and doors together, and from there, deducting their total surface area from the current existing total surface area of the house.

Find the estimate(double estimate) of what the cost of the house will be by multiplying the “costPerSqFt” with “totalSurfaceAreaFinal”.

**OUTPUTS:**

Print out your total surface area after the calculations are completed

Print out your estimate made from your calculations to receive your final answer