House painting algorithm

Output “Please enter the cost per square foot: “

Input cost per square foot, save as costPerSqFt

Output “Please enter the length of the house: “

Input length, save as houseLength

Output “Please enter the width of the house: “

Input width, save as houseWidth

Output “Please enter the height of the house: “

Input height, save as houseHeight

Output “Please enter the number of windows: “

Input number of windows, save as numWindows

Output “Please enter the length of a window: “

Input window length, save as windowLength

Output “Please enter the width of a window: “

Input window width, save as windowWidth

Output “Please enter the number of doors: “

Input number of doors, save as numDoors

Output “Please enter the length of a door: “

Input door length, save as doorLength

Output “Please enter the width of a door: “

Input door width, save as doorWidth

Calculate the surface area for the peak sides, houseLength \* houseWidth + 0.5 \* (houseLength \* (houseHeight – houseWidth)), save as surfaceAreaPeak

Calculate the surface area for the normal sides, houseLength \* houseWidth, save as surfaceAreaNormal

Calculate the surface area of the house, (2 \* surfaceAreaPeak) + (2 \* surfaceAreaNormal), save as surfaceAreaHouse

Calculate the square footage of the windows, numWindows \* (windowLength \* windowWidth), save as sqftWindows

Calculate the square footage of the doors, numDoors \* (doorLength \* doorWidth), save as sqftDoors

Calculate the square footage not painted, sqftWindows + sqftDoors, save as sqftNotPainted

Calculate the total surface area, surfaceAreaHouse – sqftNotPainted, save as totalSurfaceArea

Output the surface area, “Your total paintable surface area is ” + totalSurfaceArea +

“ square feet.”

Calculate the total cost, totalSurfaceArea \* costPerSqFt

Output the total cost, “Your estimate is “ totalCost “dollars.”