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CS176L

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<div align="center">House Painting Algorithm</div>

Input

- costPerSQFT = Please enter the cost per square foot:
- lenHouse = Please enter the length of the house:
- widHouse = Please enter the width of the house:
  - o Width will be height of the house not including the roof (or height of the walls).
- heightHouse = Please enter the height of the house:
  - o Height will be the height of the ENTIRE house.
- numWindows = Please enter the # of windows:
- lenWindows = Please enter the length of the windows:
- widWindows = Please enter the width of the windows:
- numDoors = Please enter the # of doors:
- lenDoors = Please enter the length of the doors:
- widDoors = Please enter the width of the doors:

Calculations

- normalSQFT = lenHouse * widHouse
- roof = 0.5 (lenHouse * (heightHouse - widHouse))
- peakSQFT = NormalSQFT + roof
- windowSQFT = numWindows * (lenWindows * widWindows)
- doorSQFT = numDoors * (lenDoors * widDoors)
- paintSA = peakSQFT + normalSQFT – (windowSQFT + doorSQFT)
- totalCost = costPerSQFT * paintSA

Output

- Your total paintable surface area is [paintSA] square feet.
- Your estimate is $ [totalCost].