

## House Painting algorithm

Ask the user to please enter the cost per square foot

Ask the user to please enter the length of the base of the house

Ask the user to please enter the width of the height to the edge of the roof

Ask the user to please enter the height to the peak of the roof from the ground

Ask the user for the number of windows

Ask the user to please enter the length of all windows from the bottom to the top

Ask the user to please enter the width of a door from one side to the other

Ask the user for the number of doors

Ask the user to please enter the length of all doors from the bottom to the top

Ask the user to please enter the width of all doors from one side to the other

Calculate the square feet of the sides without a peak  $\text{side} = \text{houseWidth} * \text{houseLength}$

Calculate the square feet for the sides with a peak  $\text{sidePeak} = \text{houseWidth} * \text{houseLength} + .5 * (\text{houseLength} * (\text{houseHeight} - \text{houseWidth}))$

Calculate the square feet of the doors  $\text{doorSquareFt} = \text{numDoor} * (\text{doorLength} * \text{doorHeight})$

Calculate the square feet of the windows  $\text{winSquareFt} = \text{numWin} * (\text{winLength} * \text{winHeight})$

Calculate the square feet of the house without doors or windows  $\text{houseNoWinODoor} = 2 * (\text{side} + \text{sidePeak})$

Calculate the square feet of the house with doors and windows  $\text{totalPaintArea} = \text{houseNoWinODoor} - (\text{doorSquareFt} + \text{winSquareFt})$

Calculate the estimated amount of money it will cost to paint the house

$\text{howMuch} = \text{totalPaintArea} * \text{costSquareFt}$

Display the total paintable surface area

Display the estimated amount of money it will cost