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CMSC 105

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**Design**

Main

#welcome message

#list cleaning types and tell user what defines a small medium or large house

#get user input and assign to variables

Numrooms = user input

Cleantype = user input

#call function to calculate size of house based on room numbers

Size of house = calculate\_house\_size(numrooms)

#call function to calculate cost of cleaning based on type

Cleaning cost = calculate cost of clean(cleantype)

#call function to calculate house size multiplier basd on the size of the house

Cost multiplier = calculate\_house\_multiplier(size of house)

Calculate and print total cost

Total cost = cleaning cost \* cost multiplier

Print (totalcost)

End Main

**Define Functions**

Define welcome message()

Print (welcome to Shane’s cleaning services!)

Print(We have a Full deep clean, Regular clean, and Vacuum and mop)

#function to get user input

Define user input()

Numrooms = user input(enter room numbers)

Celantype = user input(enter your clean type)

#define function to define house as small medium or large

Define calculate house size(numrooms)

If numrooms is 1 then small

If numrooms is 2-3 then medium

If numrooms is 4 or more then large

Return size of house

#define function for cost of cleaning based on chosen clean type

Define cost of clean(cleantype)

Full deep clean is 150

Regular clean Is 100

Vacuum and mop is 50

Return(cost)

#define function to calculate house size multiplier based on size of house

Define house size multiplier(size of house)

Small house is just basic cost of cleaning

Medium house is 2.5 the basic cost of cleaning

Large house Is 3.5 the basic cost of cleaning

Return(multiplier)

**Test Plan**

Test# clean type house size Expected output

1 regular clean medium(3 bed) 100 basic clean cost

2.5 multiplier for medium house

250 total cost

2 vaccuum and mop small (1 bed) 50 basic clean

1 multiplier for small house

50 total cost

3 full deep clean large(5 bed) 150 basic clean cost

3.5 multiplier for large house

525 total cost

**Screen Shots**

**Test1**

**A screenshot of a computer

Description automatically generated**

**Test 2**

**A screenshot of a computer

Description automatically generated**

**Test 3**

**A screenshot of a computer

Description automatically generated**