

Modified 08JUN22**DESIGN**

Function WelcomeInputs():

```
#Prompt user for name
#Get user response
#Prompt user for type of service, cleaning or yard
  #CLEAN
  #Prompt user for number of rooms (no_room)
  #Provide service conditions and descriptions (quick vs. deep)
  #Validate input
  #YARD
  #Mow = $5/sqft // Edge $5/sqft // Shrub $5/sqft
  #prompt user for inputs
  #validate
```

Return(name,no_rooms,type_clean,mow,edge,shrub)

Function Clean(no_rooms,type_clean):

```
#Initialize service type cost (quick_clean=15,deep_clean=25)
#Validate user input
#Initilize base room count costs (small=80,medium=150,large=200)
#Define inputs to parameters
  IF no_room <= 4          = small
  #Calculation = (small + (no_rooms * type_clean))
  ElseIf 5<= no_room >=9  = medium
  #Calculation = (medium + (no_rooms * type_clean))
  ElseIf no_room >=10     = large
  #Calculation = (large + (no_rooms * type_clean))
Return(clean_quote)
```

Function Yard(mow,edge,shrub)

```
#yard_quote calculation = (mow * 5) + (edge *5) + (shrub *5)
Return(yard_quote)
```

Function Display(name,clean_quote,yard_quote)

```
#if statement to choose which quote to use in for total
#initialize senior discount of 15%
#senior discount formula
#Prompt user for age over 65 years
#display quote with or without senior discount determined by user input
```

Main

```

name,no_rooms,type_clean,mow,edge,shrub = WelcomeInputs()
clean_quote = Clean(no_rooms,type_clean)
yard_quote = Yard(mow,edge,shrub)
Display(name,clean_quote,yard_quote)
main()

```

Test	Input	Expected	Output	Pass/Fail
1	alfonzo y 1000 2000 50 Senior - yes	Alfonzo Yard services Fees: \$15,250 Discount: \$2,287.50 Total : \$12,962.50	Alfonzo Yard services Fees: \$15,250 Discount: \$2,287.50 Total : \$12,962.50	Pass
2	allison c 10 rooms 2 deep clean Senior – no \$450	Allison Cleaning services Total \$450	Allison Cleaning services Total \$450	Pass
3	matthew y -5 250 250 50 Senior - yes	Matthew Yard services Invalid Input Fees: \$2750 Discount: \$412.50 Total: \$2337.50	Matthew Yard services Invalid Input Fees: \$2750 Discount: \$412.50 Total: \$2337.50	Pass

The image shows two IDE windows (IDLE 3.10.4) displaying Python code for a Home Service Cost Calculator. The left window shows the code being executed, and the right window shows the code being edited. A calculator window is also visible in the center.

Left Window (Execution):

```
Python 3.10.4 (tags/v3.10.4:9d38120, Mar 23 2022, 23:13:41) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:\Users\Angela\Desktop\OneDrive\UMGC\CMIS 102\MOD 8\Tackett_CMIS102_Assignment_Wk8_FINAL.py
(-----Home Service Cost Calculator-----)

What is your name? alfonzo

Welcome Alfonso! Are you looking for cleaning or yard services [C or Y]? y

|--Please take a look at our prices below--|

*MOWING: $5 PER SQUARE FOOT
*EDGING: $5 PER PERIMETER FOOT
*SHRUBS: $5 PER SHRUB

For any service that you do not want included type [0]

SQUARE FOOTAGE OF YARD: 1000
PERIMETER FOOTAGE FOR EDGING: 2000
NUMBER OF SHRUBS TO BE PRUNED: 50

Are you over 65 years old [Y or N]? y

-----ALFONSO'S SERVICE QUOTE-----

Service fees: $15250.00
Senior Discount: -$2287.50
Total w/ discount: $12962.50

**This price does not reflect other fees and taxes.
Please provide to representative when scheduling.
Thank you and have a wonderful day! :)
>>>
```

Center Window (Calculator):

Scientific

$(1000 \times 5) + (2000 \times 5) + (50 \times 5) = 15,250$

DEG F-E

MC MR M+ M- MS M*

Trigonometry Function

2nd π e CE \rightarrow

Ln: 63 Col: 0

Right Window (Editing):

```
Tackett_CMIS102_Assignment_Wk8_FINAL.py - C:\Users\Angela\Desktop\OneDrive\UMGC\CMIS 102\MOD 8\Tackett_CMIS102_Assignment_...
File Edit Format Run Options Window Help

# Home Service Cost Calculation Program
# This program will determine the price to clean a house or provide yard services determined by user inputs.
# Developer: Angela D. Tackett CMIS102 06JUN2022
# Modified: Angela D. Tackett ---- Add Functions/Yard Services 08JUN2022

#Function welcome
def WelcomeInputs():
    #Prompt user for name and display service cost options
    print("\n-----Home Service Cost Calculator-----\n\n")
    name = str(input("What is your name? "))
    service = str(input(f'\nWelcome (name.title())! Are you looking for cleaning or yard services [C or Y]? '))
    #Cleaning parameters and validation
    if service == 'C' or service == 'c':
        mow = 0
        edge = 0
        shrub = 0
        print(f'\n\n|--Please take a look at our prices below--|\n')
        # Provide prices to customer
        print("\nBASE COST PER HOME SIZE:\n")
        print(' 1-4 rooms : $80')
        print(' 5-9 rooms : $150')
        print(' 10 + rooms : $200\n')

        print("\nCLEANING OPTIONS:\n")
        print(' QUICK CLEAN : $15 per room')
        print(' DEEP CLEAN : $25 per room\n')

        print('\n*****Service Descriptions:*****\n\nQUICK CLEAN : organizing, dusting, vacuuming, and bed making.
DEEP CLEANING : quick clean parameters PLUS scrubbing tiles, sanitizing surfaces, mopping, windows, laundry, and dishes.
If there are any tasks outside of the outlined tasks, that will be at the service providers willingness, ability, pricing, and agreeance with client.

HOW MANY ROOMS WILL NEED TO BE CLEANED? 10

WHAT TYPE OF CLEANING IS REQUIRED?
Enter 1 for QUICK CLEAN
Enter 2 for DEEP CLEAN: 2

Are you over 65 years old [Y or N]? n

-----ALLISON'S SERVICE QUOTE-----

Service fees: $450.00

**This price does not reflect other fees and taxes.
Please provide to representative when scheduling.
Thank you and have a wonderful day! :)
>>>
```

Ln: 145 Col: 0

Ln: 63 Col: 0

Ln: 20 Col: 44

```
Python 3.10.4 (tags/v3.10.4:94d8120, Mar 23 2022, 23:13:41) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
> RESTART: C:\Users\Angela\Desktop\OneDrive\UMGC\CMIS 102\MOD 8\Tackett_CMIS102_Assignment_W8_FINAL.py
(-----Home Service Cost Calculator-----)

What is your name? matthew
Welcome Matthew! Are you looking for cleaning or yard services [C or Y]? y

|--Please take a look at our prices below--|
*MOWING: $5 PER SQUARE FOOT
*EDGING: $5 PER PERIMETER FOOT
*SHRUBS: $5 PER SHRUB
For any service that you do not want included type [0]

SQUARE FOOTAGE OF YARD: -5
INVALID INPUT
SQUARE FOOTAGE OF YARD: 250
PERIMETER FOOTAGE FOR EDGING: 250
NUMBER OF SHRUBS TO BE PRUNED: 50

Are you over 65 years old [Y or N]?
n
INVALID INPUT

Are you over 65 years old [Y or N]?
y

-----MATTHEW'S SERVICE QUOTE-----
Service fees: $1750.00
Senior Discount: -$412.50
Total w/ discount: $1337.50

**This price does not reflect other fees and taxes
Please provide to representative when scheduling.
Thank you and have a wonderful day! :)

Calculator
Scientific
(250 * 5) + (250 * 5) + (50 * 5) =
2,750
DEG F-E
MAC MIN M+ M- MS MT
Trigonometry Function
2nd pi e CE CI
x^2 1/x |x| exp mod
```

```
File Edit Format Run Options Window Help
# Home Service Cost Calculation Program
# This program will determine the price to clean a house or provide yard services determined by user inputs.
# Developer: Angela D. Tackett CMIS102 16JUN2022
# Modified : Angela D. Tackett ---- Add Functions/Yard Services 06JUL2022

#function welcome
def WelcomeInputs():
    #Prompt user for name and display service cost options
    print("\n(-----Home Service Cost Calculator-----)\n\n")
    name = str(input("What is your name? "))
    service = str(input("\nWelcome (name.title)!! Are you looking for cleaning or yard services [C or Y]? "))
    #Cleaning Parameters and Validation
    if service == "C" or service == "c":
        no_rooms = 0
        edge = 0
        shrub = 0
        print("\n\n|--Please take a look at our prices below--|\n")
        # Provide prices to customer
        print("\n*BASE COST PER HOME SIZE*\n")
        print(" 1-4 rooms : $50")
        print(" 5-9 rooms : $150")
        print(" 10 + rooms : $250\n")

        print("\n*CLEANING OPTIONS*\n")
        print(" 1. QUICK CLEAN : $15 per room")
        print(" 2. DEEP CLEAN : $25 per room\n")

        print("\n*Service Descriptions*-----\n\n1. QUICK CLEAN : organizing, dusting, vacuuming, and bed making.\n2. DEEP CLEANING : quote clean parameters: FMS scrubbing tiles, sanitizing surfaces, mopping, windows, laundry, and dishes.\n")
        #Prompt user for number of rooms, initialize service costs, and prompt for type of service
        no_rooms = eval(input("HOW MANY ROOMS WILL NEED TO BE CLEANED? "))
        for i in range(1000):
            if no_rooms >= 1:
                break
            else:
                print("INVALID INPUT\n")
                no_rooms = eval(input("HOW MANY ROOMS WILL NEED TO BE CLEANED? "))

        #Initialize type clean price
        quick_clean = 15
        deep_clean = 25
        #Prompt user for type of cleaning
        for i in range(1000):
            type_clean = eval(input("\nWHAT TYPE OF CLEANING IS REQUIRED? \nEnter 1 for QUICK CLEAN \nEnter 2 for DEEP CLEAN: "))
            if type_clean == 1:
                type_clean = quick_clean
            elif type_clean == 2:
                type_clean = deep_clean
            else:
                print("INVALID INPUT\n")
                type_clean = eval(input("\nWHAT TYPE OF CLEANING IS REQUIRED? \nEnter 1 for QUICK CLEAN \nEnter 2 for DEEP CLEAN: "))

        #Calculate service parameters
        if service == "Y" or service == "y":
            no_rooms = 0
            type_clean = 0
```