Design

Main
    #Initialize variables (tirePrice=140 installPrice=5, numTires,TireCost,installCost,totalCost=0)

    #Display welcome message

    #Prompt the user for number of tires
    #Get the user response

    #Calculate the cost of tires (number of tires * tirePrice)
    #Calculate the cost of installation (number of tires * installPrice)
    #Calculate the total cost of purchase (sum of costs of tires and cost of installation)

    #Display the results(totalCost)
End

Test Plan/Report

Test #	Input(no.tires)	Expected Output	Actual Output	P/F
1	2	The cost of your purchase is $290	290	Pass
2	4	The cost of your purchase is $580	580	Pass
3	8	The cost of your purchase is $1160	1160	Pass
4	-1	*** Invalid Input ***	-145	Fail
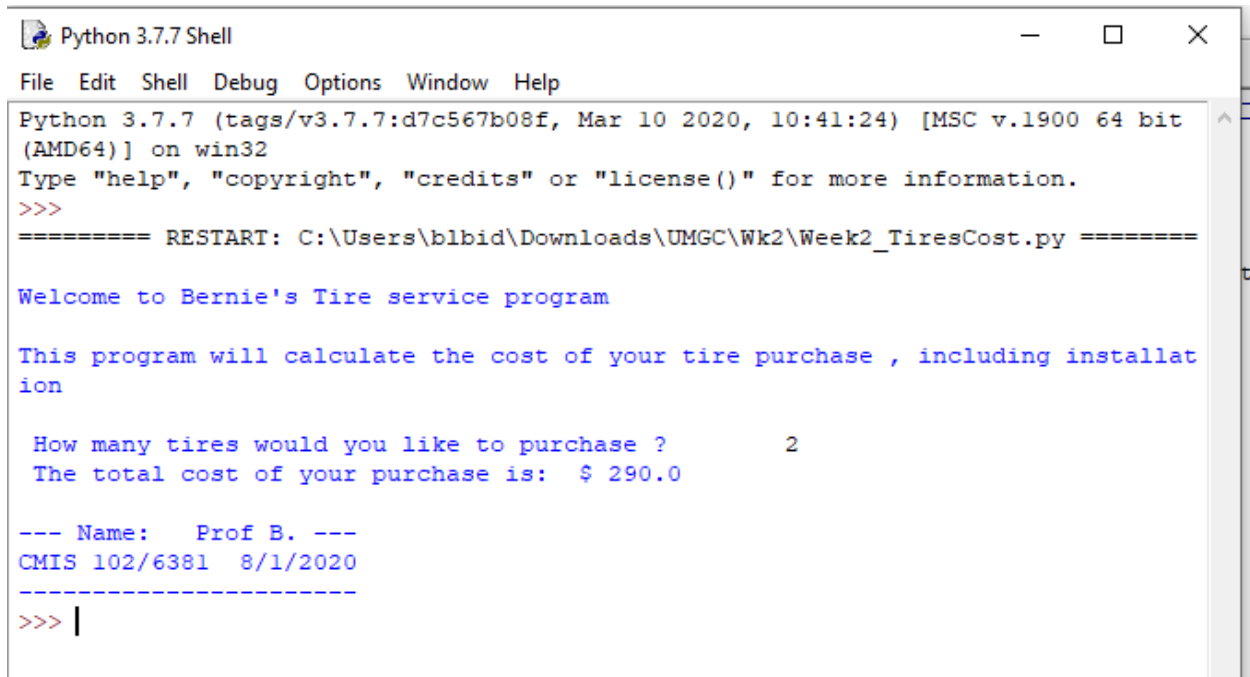
Optional (include calculaton)

Test #	Calculation	
1	2*140 = 280 (tireCost)	
	2*5 = 10 (installCost)	280+10 = 290 (totalCost)
2	4*140 = 560 (tireCost)	
	4*5 = 20 (installCost)	560+20 = 580 (totalCost)
3	8*140 = 1120 (tireCost)	
	8*5 = 40 (installCost)	1120+40 = 1160 (totalCost)
4	-1*140 = -140 (tireCost)	
	-1*5 = -5 (installCost)	-140 + -5 = -145 (totalCost)

Screen Shots

Test#1
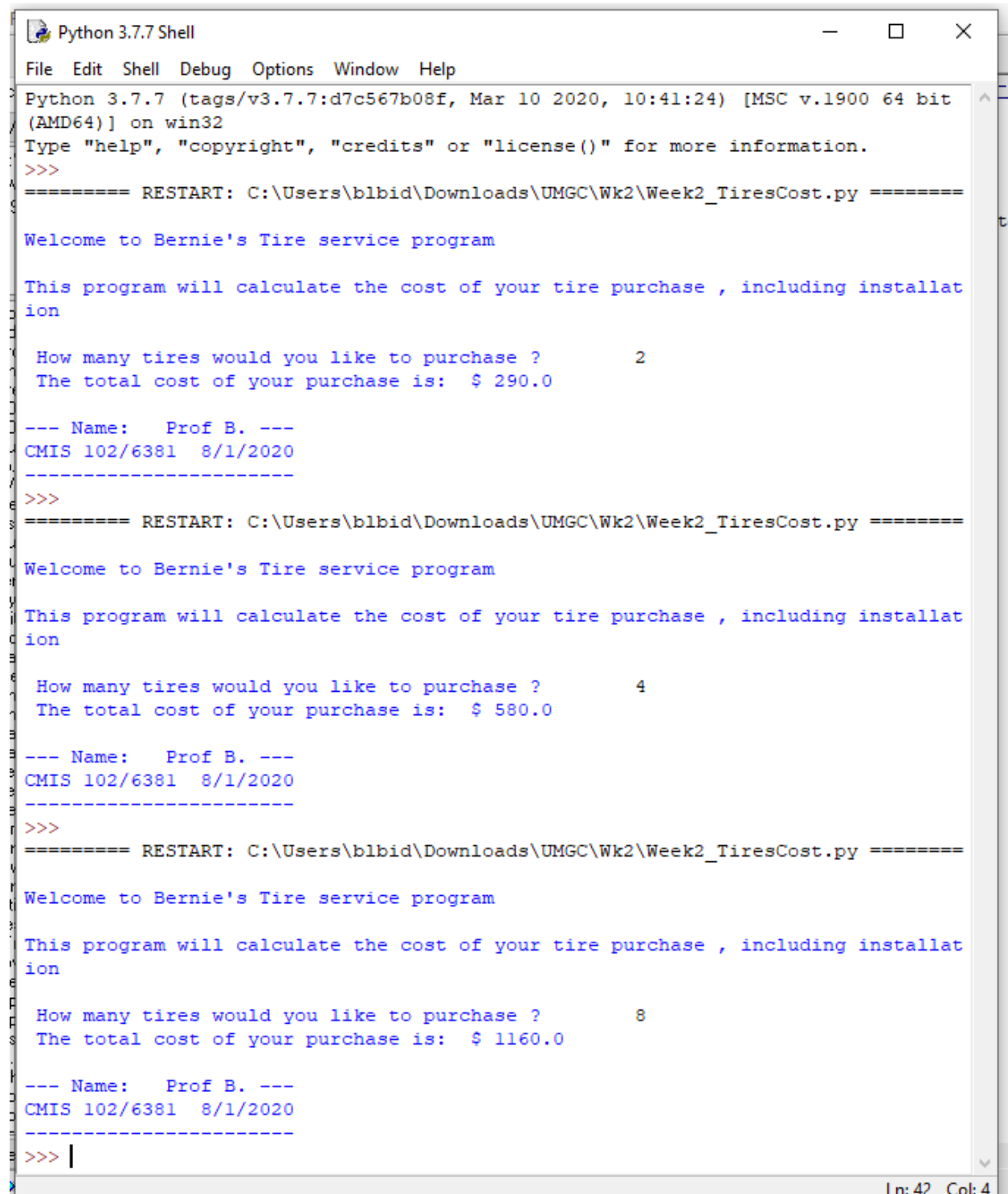
```
Python 3.7.7 Shell                                           —    □    ×

File  Edit  Shell  Debug  Options  Window  Help
Python 3.7.7 (tags/v3.7.7:d7c567b08f, Mar 10 2020, 10:41:24) [MSC v.1900 64 bit
(AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========= RESTART: C:\Users\blbid\Downloads\UMGC\Wk2\Week2_TiresCost.py ========

Welcome to Bernie's Tire service program

This program will calculate the cost of your tire purchase , including installat
ion

 How many tires would you like to purchase ?       2
 The total cost of your purchase is:  $ 290.0

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>>> |
```

Test#1-3

```
Python 3.7.7 Shell                                        —    □    ✕

File   Edit   Shell   Debug   Options   Window   Help
Python 3.7.7 (tags/v3.7.7:d7c567b08f, Mar 10 2020, 10:41:24) [MSC v.1900 64 bit
(AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========= RESTART: C:\Users\blbid\Downloads\UMGC\Wk2\Week2_TiresCost.py ========

Welcome to Bernie's Tire service program

This program will calculate the cost of your tire purchase , including installat
ion

 How many tires would you like to purchase ?        2
 The total cost of your purchase is:  $ 290.0

--- Name:    Prof B. ---
CMIS 102/6381  8/1/2020
-----------------------
>>>
========= RESTART: C:\Users\blbid\Downloads\UMGC\Wk2\Week2_TiresCost.py ========

Welcome to Bernie's Tire service program

This program will calculate the cost of your tire purchase , including installat
ion

 How many tires would you like to purchase ?        4
 The total cost of your purchase is:  $ 580.0

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CMIS 102/6381  8/1/2020
-----------------------
>>>
========= RESTART: C:\Users\blbid\Downloads\UMGC\Wk2\Week2_TiresCost.py ========

Welcome to Bernie's Tire service program

This program will calculate the cost of your tire purchase , including installat
ion

 How many tires would you like to purchase ?        8
 The total cost of your purchase is:  $ 1160.0

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>>> |
                                                              Ln: 42  Col: 4
```

Test#4

```
>>>
========= RESTART: C:\Users\blbid\Downloads\UMGC\Wk2\Week2_TiresCost.py ========

Welcome to Bernie's Tire service program

This program will calculate the cost of your tire purchase , including installat
ion

 How many tires would you like to purchase ?        -1
 The total cost of your purchase is:  $ -145.0

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>>> |
```

Ln: 55   Col: 4