# Python Fundamentals: There are 3 exercises you will need to complete for this hands-on activity.

**Exercise 1:**

For your first activity, you will need to follow along with the video tutorial. As an outcome, you will need to provide the following items…

1. Import an image file of a working Flowchart: Graphical user interface

   Description automatically generatedGraphical user interface

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1. Provide the Pseudocode based on your flowchart:

Function Main

Declare Real bill

Declare Real tip

Declare Real total

Output "Please enter the amount of the bill."

Input bill

If bill < 25

Assign tip = bill\*0.15

Else

Assign tip = bill\*.20

End

Assign total = bill+tip

Output "Your total bill including tip is $"&total

End

1. Include a working python script based on the flowchart and pseudocode you provided:

print("Please enter the amount of the bill.")

bill = float(input())

if bill < 25:

tip = bill \* 0.15

else:

tip = bill \* 0.2

total = bill + tip

print("Your total bill including tip is $" + str(total))

**Exercise 2:**

For your second activity, you will need to use the information that you’ve learned so far and provide the outcomes based on the following listed requirements.

* Develop a program which asks the user to enter three separate whole numbers
* Based on the information provided, the program will need to add the numbers together
* Once the numbers are added together, there should be an output that states “Based on the information provided, you total is” {variable name}

Provide the following for this assignment…

1. Import an image file of a working Flowchart:

Chart, funnel chart

Description automatically generated

1. Provide the Pseudocode based on your flowchart:

Function Main

Declare Real leg0

Declare Real leg1

Declare Real leg2

Declare Real table

Output "Insert the millage for the first Leg of the trip"

Input leg0

Output "Insert the millage for the 2nd Leg of the trip"

Input leg1

Output "Insert the millage for the third Leg of the trip"

Input leg2

Assign table = leg0+leg1+leg2

Output "You're Millage should be:" &table

End

1. Include a working python script based on the flowchart and pseudocode you provided:

print("Insert the millage for the first Leg of the trip")

leg0 = float(input())

print("Insert the millage for the 2nd Leg of the trip")

leg1 = float(input())

print("Insert the millage for the third Leg of the trip")

leg2 = float(input())

table = leg0 + leg1 + leg2

print("You're Millage should be:" + str(table))

**Exercise 3:**

For your third activity, you will need to use the information that you’ve learned so far and provide the outcomes based on the following listed requirements.

* Develop a program which asks for the user’s first name, last name, and age.
* Based on the user’s age decide if the user meets the age requirement to run for the office of president, (Google the age requirement if you have to).
* If the user is old enough, the program should output their full name along with their current age, and tell them good luck with their race for the presidency.
* If they are not old enough, the program should output their full name along with their current age, and mention that they are not old enough to run for the presidency.

Provide the following for this assignment…

1. Import an image file of a working Flowchart:

Chart, funnel chart

Description automatically generated

1. Provide the Pseudocode based on your flowchart:

Function Main

Declare String fname

Declare String lname

Declare Real age

Declare String no

Declare String yes

Output "Please input you first name"

Input fname

Output "Please input you last name"

Input lname

Output "Please input you age"

Input age

Assign yes = "with running for president since you are"

Assign no = "you are a too young to run for president since you are"

If age>=35

Output "Good luck "&fname &lname&yes&age

Else

Output "Good luck"&fname &lname &no &age

End

End

1. Include a working python script based on the flowchart and pseudocode you provided:

print("Please input you first name")

fname = input()

print("Please input you last name")

lname = input()

print("Please input you age")

age = float(input())

yes = "with running for president since you are"

no = "you are a too young to run for president since you are"

if age >= 35:

print("Good luck " + fname + lname + yes + str(age))

else:

print("Good luck" +fname + lname + no + str(age))