Homework Instructions (Video)

- Given in each Homework Assignment
- Grading rubric will also be given in each Homework Assignment

Sample Program Set

```
#Student name
#student ID
#Homework 1 Program Set 1
#This program finds the sum and average of 3 integers

#Data/input
name = input("What\'s your name? ")
num1 = int(input ("Enter Number 1 = "))
num2 = int(input("Enter Number2 = "))
num3 = int(input("Enter Number3 = "))

#Processing/Calculations
total = num1 + num2 + num3
average = total / 3

#output
print("\nWelcome to Python Programming,", name, "!")
print("Number 1 is", num1)
print("Number 2 is", num2)
print("Number 3 is", num3)
print("sum is", total)
print("average is", average)

#ask user to stop program
input('\n\nPress the enter key to quit')

##Output
##Test Run 1
##What's your name? Snake Charmer
##Enter Number 1 = 10
##Enter Number2 = 20
##Enter Number3 = 30
##
##Welcome to Python Programming, Snake Charmer !
##Number 1 is 10
##Number 2 is 20
##Number 3 is 30
##sum is 60
##average is 20.0
##
##
##Press the enter key to quit
##>>>

##Test Run 2
##What's your name? Nike Shoes
##Enter Number 1 = 45
##Enter Number2 = 35
##Enter Number3 = 55
##
##Welcome to Python Programming, Nike Shoes !
##Number 1 is 45
##Number 2 is 35
##Number 3 is 55
##sum is 135
```

```
##average is 45.0
##
##
##Press the enter key to quit

##Test Run 3
##What's your name? Fred Flintstone
##Enter Number1 = 25
##Enter Number2 = 36
##Enter Number3 = 54
##
##Welcome to Python Programming, Fred Flintstone !
##Number 1 is =  25
##Number 2 is =  36
##Number 3 is =  54
##The sum is 115
##The average is 38.333333333333336
##
##
##Press the enter key to quit

##Test Run 4
##What's your name? Tom Cruise
##Enter Number1 = 47
##Enter Number2 = 65
##Enter Number3 = 22
##
##Welcome to Python Programming, Tom Cruise !
##Number 1 is =  47
##Number 2 is =  65
##Number 3 is =  22
##The sum is 134
##The average is 44.666666666666664
##
##
##Press the enter key to quit

##Test run 5
##What's your name? James Dean
##Enter Number1 = 74
##Enter Number2 = 37
##Enter Number3 = 73
##
##Welcome to Python Programming, James Dean !
##Number 1 is =  74
##Number 2 is =  37
##Number 3 is =  73
##The sum is 184
##The average is 61.333333333333336
##
##
##Press the enter key to quit
```

continue next page…

Homework

1. Please go over the homework instructions and the video. The instructions will show you how to prepare your homework for submission. There is a sample of how a homework program set is to be submitted. You will submit a file for each program set. Suppose your homework has 2 program sets then you will have to submit 2 .py files.

2. You must submit the .py file with the required test runs(output) at the bottom of the program set and the test runs must be commented out.

3. Make sure to read the instructions on the homework question carefully. You are only to use topics taught in class for that homework assignment. Also, read the grading section of the homework question. I highly suggest that after you have completed your program set, check your program against the grading criteria before submission. Students lost points because they failed to follow the instructions and check the grading rubrics.

4. Make sure to have the required number of test runs at the bottom of each program set. If you do not have the number of required test runs(the required test runs specified) it is considered as an incomplete submission and that program set will receive a zero score.

Test run

What is a test run?

1. A test run is running a program once. If you are required to provide 5 test runs, then you have to run the program 5 separate times. Sample test runs are usually provided for homework and you must also use the sample test runs provided. So, if a question provided you will one sample test run, then you will also use the data from the sample test run and submit that test run as one of the 5 test runs. Meaning you will provide 4 other test runs yourself to make up the 5 test runs required.

2. The sample test run also shows you the specifications of how the output must look like. Your output must look exactly like the sample test run output given.

for example, the sample test run given:

Enter a number : 20

The number entered is : 20

The number divide by 2 is : 10

Your test run output must look exactly the same as above. You cannot change any of the specifications. The example below changes the sample test run specs and will be graded as incorrect and you will receive a zero for that whole program set. The strings were changed for example, "Enter a number : " was changed to "Hello, please input a number : " and the colon for the output were not aligned. The output for 20 and 10 in the second and third line were not right justified.

Hello, please input a number : 20

Thanks, the number you entered is : 20

Divide the number by 2 is : 10

How do I know if my program runs correctly?

The nice thing about programming is that you know the answer.

If you are to write a program to calculate the area of a rectangle, and the user inputs the length and the width. You can check your answer by using a calculator and multiply the length and the width and then check if the answer from your program matches the calculator. This is call hand tracing.

The sample test run provided for you is a solution to the program you are to code. If your program came up with exactly the same output as the sample test run, then your program should be running correctly. But you should test with other input data to make sure that it will also perform correctly with your own test data.