**CS 150 Introduction to CS I**

**Python – Worksheet 01  
Ahmad M. Osman**

1. Python File
2. Python File
3. Assume the following values have been assigned to variables.

j = 5

k = 3

m = 7

What is stored in the variable **n** after **each** statement? Treat each as a separate problem.

* 1. n = j + k \*\* 2

n = 5 + 3 \*\* 2  
 n = 5 + 9  
 n = 14

* 1. n = j + k + m  
     n = 5 + 3 + 7  
     n = 8 + 7  
     n = 15
  2. n = j / k + m  
     n = 5 / 3 + 7  
     n = 1.6666666666666667 + 7  
     n = 8.666666666666666
  3. n = j // k \* m  
     n = 5 // 3 \* 7  
     n = 1 \* 7  
     n = 7
  4. n = j % 2 + k \* 4 – m / 3  
     n = 5 % 2 + 3 \* 4 – 2.3333333333333335  
     n = 1 + 12 – 2.3333333333333335  
     n = 13 – 2.3333333333333335  
     n = 10.666666666666666
  5. n = (j + k) \* 2 – 10 / (m – k)  
     n = (5 + 3) \* 2 – 10 / (7 – 3)  
     n = 8 \* 2 – 10 / 4  
     n = 16 – 10/4  
     n = 16 – 2.5  
     n = 13.5

1. Assume the following values have been assigned to variables.

x = 3.5

y = 4.2

z = 12.35

What is stored in **t** after each statement or group of statements is executed?

* 1. t = x + y + z  
     t = 3.5 + 4.2 + 12.35  
     t = 7.7 + 12.35  
     t = 20.05
  2. t = x – y \* z  
     t = 3.5 – 4.2 \* 12.35  
     t = 3.5 – 51.87  
     t = -48.37
  3. t = x / x + z  
     t = 3.5 / 3.5 + 12.35  
     t = 1 + 12.35  
     t = 13.35
  4. t = x \* (y + 2) \* (z – 10)  
     t = 3.5 \* (4.2 + 2) \* (12.35 – 10)  
     t = 3.5 \* 6.2 \* 2.35  
     t = 21.7 \* 2.35  
     t = 50.955
  5. t = 1

t = t + 2  
t = 1 + 2  
t = 3

* 1. t = x + y + z

t = t + 2 \* t  
t = (x + y + z) + 2 \* (x + y + z)  
t = (3.5 + 4.2 + 12.35) + 2 \* (3.5 + 4.2 + 12.35)

t = 20.05 + 2 \* 20.05  
t = 20.05 + 40.1  
t = 60.15