

**CS 150 Introduction to CS I**  
**Python – Worksheet 01**  
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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.

- a. 

```
n = j + k ** 2  
n = 5 + 3 ** 2  
n = 5 + 9  
n = 14
```
- b. 

```
n = j + k + m  
n = 5 + 3 + 7  
n = 8 + 7  
n = 15
```
- c. 

```
n = j / k + m  
n = 5 / 3 + 7  
n = 1.6666666666666667 + 7  
n = 8.666666666666666
```
- d. 

```
n = j // k * m  
n = 5 // 3 * 7  
n = 1 * 7  
n = 7
```
- e. 

```
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
```
- f. 

```
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
```

4. 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?

a.  $t = x + y + z$

$$t = 3.5 + 4.2 + 12.35$$

$$t = 7.7 + 12.35$$

$$t = 20.05$$

b.  $t = x - y * z$

$$t = 3.5 - 4.2 * 12.35$$

$$t = 3.5 - 51.87$$

$$t = -48.37$$

c.  $t = x / x + z$

$$t = 3.5 / 3.5 + 12.35$$

$$t = 1 + 12.35$$

$$t = 13.35$$

d.  $t = x * (y + 2) * (z - 10)$

$$t = 3.5 * (4.2 + 2) * (12.35 - 10)$$

$$t = 3.5 * 6.2 * 2.35$$

$$t = 21.7 * 2.35$$

$$t = 50.955$$

e.  $t = 1$

$$t = t + 2$$

$$t = 1 + 2$$

$$t = 3$$

f.  $t = x + y + z$

$$t = t + 2 * t$$

$$t = (x + y + z) + 2 * (x + y + z)$$

$$t = (3.5 + 4.2 + 12.35) + 2 * (3.5 + 4.2 + 12.35)$$

$$t = 20.05 + 2 * 20.05$$

$$t = 20.05 + 40.1$$

$$t = 60.15$$