

CPSC 1301, Computer Science I Quiz

Quiz 6a

This is a timed test. You have thirty minutes to complete the test. Your deliverable will be a plain text file, that is, an ASCII file with a `.txt` file extension. When you finish the test, upload your deliverable to Canvas. Do not publish your answer to your `git` repository.

You may work with your study partner for this quiz. In fact, working together is strongly encouraged. If you work with a partner, you must each make a separate submission for credit, but you must also include the names of both authors in your submission.

Starter code This quiz covers string formatting. We will use the format *operator* (`%`), not the format *method*. You will format the same expression in a number of different ways. I will get you started:

```
1 # quiz06a.py
2
3 print("This is quiz 6a, using the string format operator:")
4
5 import math
6 import sys
7
8 pi = math.pi
9 e = math.e
10 phi = (1 + math.sqrt(5))/2
11
12 print("My system encoding is %s" % sys.getdefaultencoding())
13 print("1. %s, %s, %s" % ('%f', '%f', '%f') % ('%f', pi, 'e', '%f', phi))
```

Starter code output Here is the output. Notice that I placed square brackets (`[...]`) around the numeric formatting, just so I can check to see if you did it right.

This is quiz 6a, using the string format operator:

My system encoding is utf-8

1. π = [3.141593], e = [2.718282], ϕ = [1.618034]

Instructions and output Print the symbols and the values of pi (π), Euler's number (e), and phi (ϕ) using the formatting operator `%`. Please note that I used Unicode character code to print the Greek letters — this is advanced material and you do not have to know Unicode.

1. Format π , e, and ϕ normally using the given code
2. Format π , e, and ϕ to 20 decimal places
3. Format π , e, and ϕ to 2 decimal places
4. Format π , e, and ϕ using right justification with leading spaces
5. Format π , e, and ϕ using right justification with leading zeros
6. Format π , e, and ϕ as negative numbers (yes, I know they aren't negative)

This is quiz 6a, using the string format operator:

My system encoding is utf-8

```
1.  $\pi$  = [3.141593], e = [2.718282],  $\phi$  = [1.618034]
2.  $\pi$  = [3.14159265358979311600], e = [2.71828182845904509080],  $\phi$  = [1.61803398874989490253]
3.  $\pi$  = [3.14], e = [2.72],  $\phi$  = [1.62]
4.  $\pi$  = [          3.141593], e = [          2.718282],  $\phi$  = [          1.618034]
5.  $\pi$  = [00000000000003.141593], e = [0000000000002.718282],  $\phi$  = [0000000000001.618034]
6.  $\pi$  = [-3.141593], e = [-2.718282],  $\phi$  = [-1.618034]
```