

Name:

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On Pre-flights:

- If you work with anyone else, document what you worked on together.
- If you are not using python, then substitute your language of choice when Python is specified.

Do not write in the table to the right.

Problem	Points	Score
1	5	
2	5	
3	5	
4	5	
5	10	
Total:	30	

1. (5 points) Describe the basic variable types available in Python.
  
  
  
  
  
  
  
  
  
  
2. (a) (2 points) What does the variable *None* mean in Python?
  
  
  
  
  
  
  
  
  
  
- (b) (3 points) What is an example of how to use this built-in variable?
  
  
  
  
  
  
  
  
  
  
3. State the solution to the following:
  - (a) (1 point)  $10\%3$
  
  
  
  
  
  
  
  - (b) (1 point)  $11//6$
  
  
  
  
  
  
  
  - (c) (1 point)  $4**3$
  
  
  
  
  
  
  
  - (d) (1 point)  $12/5$

(e) (1 point)  $6 \neq 5$

4. (a) (2 points) What is the default encoding of strings in Python?

(b) (1 point) What is the starting index number in Python?

(c) (1 point) How do you reference the last element of a string?

(d) (1 point) How do you concatenate strings?

5. (a) (2 points) Define the meaning of module in Python.

(b) (2 points) Define the meaning of package in Python.

(c) (2 points) Name at least 3 ways to import a function from a module in Python.

- (d) (2 points) What is required to make packages visible in Python?
- (e) (2 points) Label the following directory structure as packages, subpackages, or modules:
- ```
pyScripts/  
— __init__.py  
— physics.py  
— BasicCalcs/  
— — __init__.py  
— — morephysics.py  
— — evenmorephysics.py  
— AdvancedCalcs/  
— — readme.txt  
— — advancedphysics.py
```