CSE 160 Section 1 Problems

1. For each expression, write the resultant value and the data type of the value (for instance, Integer)
   a. 42
   b. 42 + 91 / 3.0
   c. 42 / 5 + 2.0
   d. True
   e. 42 < 45
   f. not 42 < 91
   g. "May the force be with you."
   h. float(3) < 9

2. Write the output to the following program:

   for value in [1, 3, 5]:
       print(value + value ** 2)

3. Write a for loop that will print the result of multiplying 3 by the numbers 8 through 12. The example solution is two lines long. Your output should read:

   24
   27
   30
   33
   36

4. For each list write an equivalent call using range(). For each call using range() give the corresponding list.
   a. [0, 1, 2, 3]
   b. [-4, -3, -2, -1, 0]
   c. list(range(0, 10, 2))
   d. list(range(2, 11, 3))
   e. [25, 20, 15, 10, 5, 0]
   f. list(range(1000, -100, -100))
CSE 160 Section 1 Solutions

1. Solutions appear below:

   a. 42 integer
   b. 72.333 float
   c. 10.4 float
   d. True bool (or truth value)
   e. True bool (or truth value)
   f. False bool (or truth value)
   g. "May the force be with you." string
   h. True bool (or truth value)

2. The output appears below:

   2
   12
   30

3. Possible solution appears below:

   ```python
   for value in [8, 9, 10, 11, 12]:
       print(3 * value)
   
   or
   
   for value in range(24, 37, 3):
       print(value)
   ```

4. Possible solutions appear below:

   a. list(range(4)) or list(range(0, 4, 1))
   b. list(range(-4, 1)) or list(range(-4, 1, 1))
   c. [0, 2, 4, 6, 8]
   d. [2, 5, 8]
   e. list(range(25, -1, -5))
   f. [1000, 900, 800, 700, 600, 500, 400, 300, 200, 100, 0]
1) I have Anaconda and VSCode installed on my computer:  

YES  NO

2) Please rate how comfortable you are with these topics so far.
   1 = not very confident about this
   3 = moderately confident about this
   5 = very confident about this
   _____ Expressions
   _____ Variables
   _____ print statement
   _____ range
   _____ command line vs. python interpreter

3) Any thoughts/concerns about this class?