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

3. Write the output to the following program:
   ```
   for value in [1, 3, 5]:
       print value + value ** 2
   ```

4. 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
   ```

5. Write the output to the following program:
   ```
   for i in [1, 2, 3]:
       for j in [1, 2, 3]:
           print i + j
   ```

6. Write the output to the following program:
   ```
   sum = 0
   for i in [1, 2, 3]:
       for j in [1, 2, 3]:
           sum = sum + i
   print sum
   ```