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. "What does the fox say?"
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
```

CSE 160 Section 1 Solutions

1. Solutions appear below:

    a. 42. integer
    b. 72.333 float
    c. 10.0 float
    d. True bool (or truth value)
    e. True bool (or truth value)
    f. False bool (or truth value)
    g. "What does the fox say?" string
    h. True bool (or truth value)

2. Possible solutions appear below:

    a. range(4) or range(0,4,1)
    b. range(-4,1) or range(-4,1,1)
    c. [0,2,4,6,8]
    d. [2,5,8]
    e. range(25,i,-5) where i is one of [-1,-2,-3,-4,-5]
    f. [1000, 900, 800, 700, 600, 500, 400, 300, 200, 100, 0]

3. The output appears below:

```
2
12
30
```

4. Possible solution appears below:

```
for value in [8, 9, 10, 11, 12]:
    print 3 * value
```

or

```
for value in range(24,37,3):
    print value
```

5. The output appears below:

```
2
3
4
3
4
5
4
5
6
```

6. The output appears below:

```
18
```