CSE 160 Section 2 Problems

1. Write the output to the following program:

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

2. 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

3. 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))
```

4. Write the output to the following program:

```
for i in [1, 2, 3]:
for j in [1, 2, 3]:
print(i + j)
```

5. 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)
```

6. Fill in the necessary code to count the number of times the letter "I" appears in all of the list words.

```
words = ["hello", "world", "python", "yellow"]
I_count = 0
...
print(I_count)
The output should be 5
```

7. Write code to print the number of people over 20 years old in the list ages.

```
ages = [20, 21, 20, 22, 19, 18, 14, 35]
```

8. Write code that calculates and prints out the number of people 30 years old and above, the number of people 20-29 years old, and the number of people under 20 years old in the list ages.

9. Write code that counts the odd numbers in a list.