

## CSE 160 Section 5 Solutions

1. {1, 6, 3, 9, 5, 2, 4} (note values in random order)

2. `print(set_one & set_two)`

The intersection is: {'a', 'c', 'd'}

3.

```
def all_unique_words(file_name):
    f = open(file_name, "r")
    unique_words = set()
    for line in f:
        words = line.split()
        for word in words:
            unique_words.add(word)
    return len(unique_words)
```

4.

```
def report_long_lines(file_name, max_length):
    num_lines = 0
    f = open(file_name, "r")
    for line in f:
        if len(line) > max_length:
            num_lines += 1
    return num_lines
```

5.

```

def write_prime_numbers(file_name, end_number):
    write_file = open(file_name, "w")
    for num in range(1, end_number):
        for factor in range(2, num + 1):
            if factor == num:
                write_file.write(str(num) + "\n")
            elif num % factor == 0:
                break
    write_file.close()

```

(Optional Pre-Midterm Questions)

1.

```

def reverse_list(original_list):
    result = []
    for element in original_list:
        result.insert(0, element)
    return result

```

2. Location A:

Global Environment	percent_error
a -> 15.0	actual -> 15.0
b -> 10.0	expected -> 10.0
pos_dif -> (function)	
percent_error -> (function)	

Location B:

Global Environment	percent_error	pos_dif
a -> 15.0	actual -> 15.0	y -> 15.0
b -> 10.0	expected -> 10.0	x -> 10.0
pos_dif -> (function)		
percent_error -> (function)		

Location C:

Global Environment

a -> 15.0

b -> 10.0

pos\_dif -> (function)

percent\_error -> (function)

percent\_error

actual -> 15.0

expected -> 10.0

x -> 5.0

y -> 10.0