Week 11 Assignment 11

1. Predict the output of the following program:

```python
num = 5
num += 3
print(num)
```

A. 8
B. 1
C. 8
D. 3

2. Explanation of the following code snippet:

```python
for i in range(10):
    print(i)
```

A. It prints the numbers 0 to 9.
B. It prints the numbers 1 to 10.
C. It prints the numbers 0 to 10.
D. It prints the numbers 1 to 9.

3. Predict the output of the following Python program:

```python
my_list = [1, 2, 3, 4, 5]
my_list.append(6)
print(my_list)
```

A. [1, 2, 3, 4, 5]
B. [1, 2, 3, 4, 5, 6]
C. [1, 2, 3, 4, 5, 6]
D. [6]

4. Explanation of the following Python operator:

```python
num = 10
num *= 5
```

A. It multiplies the number by 5.
B. It adds the number to 5.
C. It subtracts 5 from the number.
D. It divides the number by 5.

5. Predict the output of the following Python expression:

```python
10 + 20 * 3 / 2 - 4
```

A. 39
B. 54
C. 22
D. 30

6. Predict the output of the following Python expression:

```python
len('hello World')
```

A. 14
B. 10
C. 5
D. 11

7. Predict the output of the following Python expression:

```python
str(10) + str(20)
```

A. '1020'
B. '10 20'
C. '10020'
D. '10

8. Explain the difference between the `str()` and `int()` functions in Python.

A. `str()` is used to convert a number to a string, while `int()` is used to convert a string to a number.
B. `str()` is used to convert a string to a number, while `int()` is used to convert a number to a string.
C. `str()` is used to convert a string to a list, while `int()` is used to convert a list to a string.
D. `str()` is used to convert a number to a list, while `int()` is used to convert a list to a number.

9. Predict the output of the following Python program:

```python
my_list = [1, 2, 3, 4, 5]
my_list[1:3] = [100, 200]
print(my_list)
```

A. [1, 100, 100, 4, 5]
B. [1, 100, 200, 100, 5]
C. [1, 100, 200, 4, 5]
D. [1, 2, 3, 4, 5]

10. Predict the output of the following Python expression:

```python
x = True
y = False
not x and y
```

A. True
B. False
C. x
D. y

11. Predict the output of the following Python expression:

```python
x = 10
y = 20
x = y = 0
print(x, y)
```

A. 0 0
B. 10 20
C. 0 20
D. 10 0

12. Predict the output of the following Python program:

```python
my_list = [10, 20, 30, 40, 50]
my_list.extend([60, 70, 80, 90])
print(my_list)
```

A. [10, 20, 30, 40, 50, 60, 70, 80, 90]
B. [10, 20, 30, 40, 50]
C. [10, 20, 30, 40, 50, 60, 70, 80]
D. [10, 20, 30, 40, 50, 60, 70, 80, 90]

13. Predict the output of the following Python program:

```python
my_dict = {'a': 1, 'b': 2, 'c': 3}
my_dict['d'] = 4
print(my_dict)
```

A. {'a': 1, 'b': 2, 'c': 3, 'd': 4}
B. {'a': 1, 'b': 2, 'c': 3}
C. {'a': 1, 'b': 2, 'c': 3, 'd': 4}
D. {'a': 1, 2, 3, 'd': 4}

14. Predict the output of the following Python program:

```python
my_set = {1, 2, 3, 4, 5}
mymap = map(lambda x: x * 2, my_set)
print(list(mymap))
```

A. [2, 4, 6, 8, 10]
B. [1, 2, 3, 4, 5]
C. [2, 4, 6, 8, 10]
D. [1, 2, 3, 4, 5]

15. Predict the output of the following Python program:

```python
my_dict = {'a': 1, 'b': 2, 'c': 3}
print(len(my_dict))
```

A. 1
B. 2
C. 3
D. 4

16. Predict the output of the following Python program:

```python
my_list = [1, 2, 3, 4, 5]
my_list.sort()
print(my_list)
```

A. [1, 2, 3, 4, 5]
B. [2, 3, 4, 5, 1]
C. [3, 2, 1, 5, 4]
D. [5, 4, 3, 2, 1]