

Full Name _____

7½ points.

Section & Subsection _____

Roll # _____

1. (½ point) What is the result of the following code?

```
xs = range(3)
x = sum(xs)
y = sum(xs)

print(x, y)
```

A. None None B. Error C. 3 3 D. 4 E. 3 0
F. 3 None G. 6

2. (½ point) What is the result of the following code?

```
xs = range(3)
ys = range(2)
print(xs + ys)
```

A. 5 B. [0, 1, 2, 0, 1] C. Error D. 3
E. [[0, 1, 2], [0, 1]]

3. (2 points) The below function tries to flatten a nested list. For an input: [[1, 2, 3], [4], 5, 5.5, False]. The expected Output: [1, 2, 3, 4, 5, 5.5, False] List the error in the following function and write the corrected function.

```
def flatten_list(l):
    out = []
    for item in l:
        for subitem in item:
            out.append(subitem)
    return out
```

4. (½ point) What is the output of the following program? Explain.

```
x = 0.3
y = x==0.2 + 0.1
print(y)
```

5. (½ point) What is the result of the following code

```
x = 10.0
for x in range(2):
    print(x, end=",")
    x = x + 1
    print(x, end=",")
```

A. 10,10,10,10, B. 10,11,12,13 C. 10,10,10,10
D. 0,1,1,2, E. 0,1,1,2

6. (½ point) What is the result of the following code?

```
def f(x):
    return x[1:]
def g(x):
    return f(x[1:])
z = "hello"
print(f(z), g(z))
```

A. llo lo B. 0 1 C. ello ello D. None E. llo llo
F. Error G. ello llo H. 1 2

7. (½ point) What is the result of the following code?

```
xs = range(10)
ys = range(xs[1], xs[2])
print(sum(ys))
```

A. 3 B. 23 C. 0 D. Error E. None F. 1

8. (½ point) What is the result of the following code

```
def g(x):
    return x % 2 == 1
def f(x):
    s = 0
    for i in range(x):
        if g(i):
            s = s + i
    return s
print(f(1), f(6))
```

A. 0 9 B. 6, 0 C. 0, 6 D. 1 6 E. 0 F. Error
G. s H. None

9. (½ point) What is the result of the following code

```
x = 4
def f(x):
    for i in range(x):
        if i % 3 == 1 or i % 5 == 1:
            return i
    print(i, end=" ")
print(f(1), f(5))
```

A. None None None None B. 0 0 None 1
C. Syntax Error D. 0 None 1 None E. 1 1 1 1 F. 0 0

10. (½ point) What is the result of the following code?

```
x = 10
y = 5
x = [x]
x = [x] + x + [x]
z = [x, y]
print(z)
```

A. [[10], [10], [10], 5] B. [[[10], 10, [10]], 5]
C. Error D. [[10], [10], [10], [5]] E. None
F. [[10], [10], [10]], 5 G. [10, 10, 10, 5]

11. (½ point) What is the output of the following program? Explain.

```
x = 0.3
y = x==0.2 + 0.1
print(y)
```

12. (½ point) What is the result of the following code?

```
xs = range(3)
ys = list(xs) + list(xs)
print(sum(ys[1:4]))
```

A. 3 B. 5 C. None D. Error E. 4
F. None None None G. 6

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Section & Subsection _____

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1. (½ point) What is the result of the following code?

```
xs = range(3)
ys = range(2)
print(xs + ys)
```

A. Error B. 5 C. 3 D. [0, 1, 2, 0, 1]
E. [[0, 1, 2], [0, 1]]

2. (½ point) What is the result of the following code

```
x = 10.0
for x in range(2):
    print(x, end=",")
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    print(x, end=",")
```

A. 10,10,10,10 B. 10,11,12,13 C. 0,1,1,2,
D. 10,10,10,10, E. 0,1,1,2

3. (½ point) What is the result of the following code?

```
xs = range(3)
ys = list(xs) + list(xs)
print(sum(ys[1:4]))
```

A. 5 B. Error C. 6 D. None E. 3
F. None None None G. 4

4. (½ point) What is the output of the following program? Explain.

```
x = 0.3
y = x==0.2 + 0.1
print(y)
```

5. (½ point) What is the result of the following code?

```
xs = range(3)
x = sum(xs)
y = sum(xs)
```

```
print(x, y)
```

A. Error B. 3 3 C. 3 None D. None None E. 6 F. 4
G. 3 0

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```
x = 4
def f(x):
    for i in range(x):
        if i % 3 == 1 or i % 5 == 1:
            return i
        print(i, end=" ")
print(f(1), f(5))
```

A. 1 1 1 1 B. 0 None 1 None C. None None None None
D. Syntax Error E. 0 0 F. 0 0 None 1

7. (½ point) What is the result of the following code?

```
def f(x):
    return x[1:]
def g(x):
    return f(x[1:])
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print(f(z), g(z))
```

A. 1 2 B. llo llo C. llo lo D. ello llo
E. ello ello F. None G. 0 1 H. Error

8. (½ point) What is the result of the following code?

```
xs = range(10)
ys = range(xs[1], xs[2])
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A. 1 B. 0 C. 23 D. Error E. 3 F. None

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```
def g(x):
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print(f(1), f(6))
```

A. 0 9 B. 0 C. 6, 0 D. 0, 6 E. Error F. 1 6
G. None H. s

10. (½ point) What is the output of the following program? Explain.

```
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12. (½ point) What is the result of the following code?

```
x = 10
y = 5
x = [x]
x = [x] + x + [x]
z = [x, y]
print(z)
```

A. Error B. [[10], [10], [10], 5]
C. [[[10], 10, [10]], 5] D. None
E. [10, 10, 10, 5] F. [[10], [10], [10]], 5]
G. [[10], [10], [10], [5]]