

Python Programming

Assignment 1 September 29, 2022

Please submit the copy version to L4-213 next class (2022.10.8, SAT). (100 points)

1. What is the output of the following code? (6 points)

```
x = 100
y = 50
print(x and y)

A. True B. 100 C. False D. 50
```

2. Which of the following operators has the highest precedence? (6 points)

```
A. not B. C. * D. +
```

3. What is the output of the following code? (6 points)

```
x = 6
y = 2
print(x ** y)
print(x // y)
```

- 4. What is the output of print (2**3**2) (6 points)
- 5. What is the output of the expression print(-18//4) (6 points)
- 6. **4** is 100 in binary and **11** is 1011. What is the output of the following bitwise operators? (6 points)

```
a = 4
b = 11
print(a | b)
print(a >> 2)
```

7. What is the output of the following list operation? (8 points)

```
simple_list = [10, 20, 30, 40, 50]
print(sample_list[-2])
print(sample_list[-4:-1])
```

8. What is the output of the following code? (8 points)

```
l = ["Python", [4, 8, 12, 16]]
print(l[0][1])
print(l[1][3])
```

9. What is the output of the following code? (6 points)

```
print(int(2.999))
```

10. What is the type of the following variable x? (6 points)

```
x = -5j
```

A. int B. complex C. real D. imaginary

11. In Python3, the integer ranges from **-2,147,483,648** to **+2,147,483,647**. (8 points)

A. True B. False

12. What is the output of the following math function? (6 points)

```
import math
print(math.ceil(252.4))
print(math.floor(252.4))
```

13. What is the result of the following code? (8 points)

```
print(type([]) is list)
```

A. True B. False

14. Select all the right ways to create a string literal *Ault'Kelly*. (8 points)

```
A. s = 'Ault\\'Kelly'
B. s = 'Ault\'Kelly'
C. s = """Ault'Kelly"""
```

15. What is the output of the following code? (6 points)

```
print (bool (0), bool (3.14159), bool (-3), bool (1.0+1j))
```

A. False True False True

B. True True False True

C. False True True True