Home Work II (Day 4)

Variables, Data Types, Logical, Membership and Identity Operators

1. Python Swapping means interchanging the values of two variables.

Eg: - if x is 10 and y is 5 then after swapping x will be 5 and y will be 10.

2. Numbers consist of all the numeric values. Numbers in Python are

classified into the following data types.

❖ int - Integers don’t have decimal and can have any length as long as the

required memory is available. For example, 3, 855, etc.

❖ float - Floating point numbers are the ones having decimal. For example,

2.564728.

❖ complex - Complex numbers, as in Mathematics, have the form a + bj,

where a is the real part and b is the imaginary part. For example, 2 + 3j, 6j.

3. What is the output of the following code?

x = 6

y = 2

print(x \*\* y)

print(x // y)

ouput:

36

3

4. 4 is 100 in binary and 11 is 1011. What is the output of the following

bitwise operators?

a = 4

b = 11

print(a | b) print(a >> 2)

output:

15

1

5. What is the output of the following assignment operator?

y = 10

x = y += 2

print(x)

output:

x = y += 2

^

SyntaxError: invalid syntax

6. What is the output of print(2 \* 3 \*\* 3 \* 4)?

Output: 216

7. What is the output of print(10 - 4 \* 2)

Output:2

8. What is the output of the expression print(-18 // 4)

Output: -5

9. What is the output of the following Python code?

x = 10

y = 50

if x \*\* 2 > 100 and y < 100:

print(x, y)

10. What is the output of the following code?

x = 100

y = 50

print(x and y)

output:50

11. In Python 3, what is the output of type(range(5)). (What data type it will

return).

Output:<class `range’>

This indicates that the object created by range(5) is of the range type. The range type represents an immutable sequence of numbers.

12. What is the data type of print(type(10)

Output:

<class `int’>

It is the number 10 is the integer type.