21 May

**Python Basic - 2**

Q.1. Create two int type variables, apply addition, subtraction, division and multiplications and store the results in variables. Then print the data in the following format by calling the variables:

First variable is \_\_ & second variable is \_\_.

Addition: \_\_ + \_\_ = \_\_

Subtraction: \_\_ - \_\_ = \_\_

Multiplication: \_\_ \* \_\_ = \_\_

Division: \_\_ / \_\_ = \_\_

**a= 6**

**b= 2**

**print(“Addition”, a+b)**

**print(“subtraction”, a-b)**

**print(“Multiplication”, a\*b)**

**print(“Division”, a/b)**

Q.2. What is the difference between the following operators:

(i) ‘/’ & ‘//’ - **/ - is a float division operator while // - is integer division operator(returns the integer part of the quotient only.**

(ii) ‘\*\*’ & ‘^’ : **\*\* is power operator is a power operator(x\*\*y means (x) to power y. Whereas, ^ is bitwise XOR operator meaning it operates on binary of the number and return true(1) when the variable bit values are not same( both can not be 0 or 1) and False when both bit values are same(either 0 or 1).**

Q.3. List the logical operators.

**AND, OR, NOT**

Q.4. Explain right shift operator and left shift operator with examples.

**Right shift operator(>>): It shifts the bits to the right by defined number of shift. In decimal system, it divides the number by 2\*\*number of shifts.**

**Example: n=8>>2**

**n= 8/(2\*2)=2**

**Left shift operator(<<): It shifts the bits to the left by defined number of shift. In decimal system, it multiplies the number by 2\*\*number of shifts.**

**Example: n=3>>2**

**n= 3\*(2\*2)=12**

Q.5. Create a list containing int type data of length 15. Then write a code to check if 10 is present in the list or not.

**a=[1,2,3,4,5,6,7,8,9,12,34,10,23,56,22]**

**print(len(a))**

**if i in a:**

**print(“10 is present”)**

**else:**

**print(“10 is not present”)**