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:

```
var1r = 5
var2 = 10
x = var1 + var2
a = var2 - var1
b = var2 / var1
z = var1*var2
print("Addition of " + str(var1) + " and " + str(var2) + " is", x)
print("Substraction of " + str(var2) + " by" + str(var1) + " is", a)
print("Division of " + str(var2) + " by " + str(var1) + " is",b)
print("Multiplication of " + str(var1) + " and " + str(var2) + " is", x)
 Q.2. What is the difference between the following operators:
 (i)
         '**' & '^'
 (ii)
ans
       / is regular division
       // is floor division ie it will return only integer no floats
** is exponential operator in python
^ is a bitwise XOR operator
 Q.3. List the logical operators.
```

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

and, or, not

Python bitwise left shift operator shifts the left operand bits towards the left side for the given number of times in the right operand. In simple terms, the binary number is appended with 0s at the end.

Python right shift operator is exactly the opposite of the left shift operator. Then left side operand bits are moved towards the right side for the given number of times. In simple terms, the right side bits are removed.

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.

```
list = list(range(1, 16))

if 10 in list:
    print("10 is present in the list.")
else:
    print("10 is not present in the list.")
```