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: __ / __ = __
```

Sol-

first variable = 10

```
second_variable = 5

addition_result = first_variable + second_variable

subtraction_result = first_variable - second_variable

multiplication_result = first_variable * second_variable
```

```
division_result = first_variable / second_variable

print("First variable is", first_variable, "& second variable is",
    second_variable)

print("Addition:", first_variable, "+", second_variable, "=",
    addition_result)

print("Subtraction:", first_variable, "-", second_variable, "=",
    subtraction_result)

print("Multiplication:", first_variable, "*", second_variable, "=",
    multiplication_result)

print("Division:", first_variable, "/", second_variable, "=",
    division_result)
```

- Q.2. What is the difference between the following operators:
- (i) '/' & '//' '/' is the division operator and returns the result as float and '//' returns the result as integer.
- (ii) '**' & '^' '**' is the exponentiation operator and '^' is the bit wise operator.
- Q.3. List the logical operators.

Sol- and, or, not

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

Sol- Right shift operator shifts the bits of the left operand to the right by the number of positions specified by the operator.

Left shift operator- It shifts the bit of the left operand to the left by the number of positions specified by the right operand.

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.

Sol-

my_list = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15]

if 10 in my_list:

```
print("10 is present in the list.")
else:
```

print("10 is not present in the list.")