**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:

def calculator ():

num1 = float(input("Enter the 1st number: "))

num2 = float(input("Enter the 2nd number: "))

sum\_result = num1 + num2

diff\_result = num1 - num2

mul\_result = num1 \* num2

div\_result = num1 / num2

return{

"sum":sum\_result,

"diff":diff\_result,

"Mult":mul\_result,

"quotient":div\_result

}

results = calculator()

print("The sum of the two numbers:", results ["sum"])

print("The differnce of the two numbers:", results["diff"])

print("Multiplication :", results["Mult"])

print("The quotient:",results ["quotient"])

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

1. ‘/’ & ‘//’ = ‘/’ it’s a divisional operator and ‘//’ its comparative variable
2. ‘\*\*’ & ‘^’ = “\*\*” its exponential operator and “^” 0r operator either A or b not both set
   1. List the logical operators.

and (x and y) is True if both x and y are true.

or (x or y) is True if either x or y is true.

not (x not y) If a condition is true then Logical not operator will make false.

* 1. Explain right shift operator and left shift operator with examples.

X`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. Example : a=20 a<<2 = 80

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. a = 20 a>>2 =5

* 1. 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 = ["apple","mango","star",20, 84,49,21,35,45,12.50,"mars","Roank",25.40,10,"Alice"]

code is

i = 10

if i in list:

print("exist")

else

print("doesn't exist")