Assignment 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: __ / __ = __

Ans-

Input:

```
a= int(input("Variable1 :"))

b= int(input("Variable2 :"))


print("Addition of ",a, "+",b, "=", a+b)

print("subtraction of ",a, "-",b, "=", a-b)

print("multiplication of ",a, "*",b, "=", a*b)

print("division of ",a, "/",b, "=", a/b)
```

Output:

```
Variable1 :22
Variable2 :32
Addition of 22 + 32 = 54
subtraction of 22 - 32 = -10
multiplication of 22 * 32 = 704
division of 22 / 32 = 0.6875
```

2. What is the difference between the following operators:

(i) '/' & '//

Ans-'/'= Divides (float) it divides the first operand by second.

Example=

```
a=5/2

Print(a)
```

Output:

2.5

‘//’= Division(floor) first operand by the second . its round off the next smallest number.

Example=

a= 5//2

print(a)

Output:

2

(ii) ‘’ & ‘^’**

‘’ =** It is called exponentiation **it** raised the power of b . take an example

Example-

a=2

b=3

c=(a**b)

print(c)

Output:

8

Q.3. List the logical operators.

Ans- There are three logical operators in python.

1. AND
2. OR
3. NOT

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

Ans- << Left Shift= The left operand's value is moved to its left by the number of bits specified in the right argument.

Example

```
a = 10
a >> 10
Output:
 5
```

>>Right Shift=The quantity of bits provided by the right parameter advances the position of the left operand.

Example:

```
a = 5

a << 1
```

Output

```
10
```

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.

Ans-

```
d1= ['1,2,3,4,5,6,7,8,9,10,11,12,13,14,15']

if 10 in d1:

    print("10 is present in the list")

else:

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

Output:

10 is present in the list