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

Answer:

a=20

b=10

print("The first variable is",a,"and the second variable is",b)

sum=a+b

sub=a-b

mult=a\*b

div=a/b

print("a+b=",sum)

print("a-b=",sub)

print("a\*b=",mult)

print("a/b=",div)

Output:

The first variable is 20 and the second variable is 10

a+b= 30

a-b= 10

a\*b= 200

a/b= 2.0

2. What is the difference between the following operators:

(i) ‘/’ & ‘//’

(ii) ‘\*\*’ & ‘^’

Answer:

‘/’ is division and ‘//’ is floor division.

x=20

y=5

c=a/b

d=a//b

print(c)

print(d)

Output:

2.0

2

# a/b prints the quotient as it is but a//b prints the round of the quotient.

3. List the logical operators.

Answer:

There are 3 logical operators AND, OR and NOT.

AND - &&

OR - ||

NOT - !

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

Answer:

Left shift operator – indicates that the bits are shifted to left.

Ex: 0010 << 1 → 0100

0010 << 2 → 1000

Right shift operator – indicates that the bits are shifted to right.

Ex: 1011 >>> 1 → 0101  
1011 >>> 3 → 0001

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.

Answer:

List1=[1,2,3,4,5,6,7,8,9,10,11,12,13,14,15]

i=10

if i in List1:

print('element exist')

else:

print('element does not exist.')

Output:

element exist