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:-

```
a= 20
b= 10
add = a+b
Sub = a-b
multi = a*b
div = a/b
print("Addition: a + b =",add)
print("Subtraction: a - b =",Sub)
print("Multiplication: a * b =",multi)
print("Division: a / b =",div)
```

Q.2. What is the difference between the following operators:
(i) '/' & '//'
(ii) '**' & '^'
ANS:-
i) / stands for division and // stands for floor division. In division you get the normal value of your division but in floor division you only get integers as answer the values after decimal will not be displayed.
ii) ** It is an arithmetic operator and is called exponential , ^ this is XOR operator and is a bitwise operator.if any one bit is 1 then corresponding bit is set to 1 otherwise if both 1 or both 0 then it is set to be zero.

Q.3. List the logical operators.
ANS:- and , or ,not all are logical operators and they return true or false as values.
Q.4. Explain right shift operator and left shift operator with examples.
ANS:-
The bitwise shift operators are the right-shift operator (>>), which moves the bits of an integer or enumeration type expression to the right, and the left-shift operator (<<), which moves the bits to the left.

Eg. Right shift	left shift
a=10	a=10
b=a>>2	b=a<<2
print(b	print(b)
2 is the value	**40 is the value**

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:-

```
list1 = [1,2,3,4,5,6,7,8,9,10,11,12,13,14,]
for i in list1:
    if i == 10:
        print("yes 10 is present")
```