

04-09-2025

OPERATORS: It is a special symbol used to perform certain operations b/w operands

ex: a=3 z=x+y

operator: a , operands: 3 operator:+ , operands: x,y,z

- Types of operators
- 1. Arithmetic operator: +, -, *, /, %, //, **
- 2. Comparison/ Relational operator: >, <, <=, >=, ==, !=
- 3. Logical operator: and, or, not

and - All the conditions should pass or TRUE

or - At least any one conditions should pass or TRUE

not - vise versa

a b and or XOR XNOR

F F F F T F

F T F T F T

T F F T F T

T T T T T F

- 4. Assignment operator: =, +=, -=, *=, /=, %=, //=, **=
- 5. Bitwise operator: &, |, ~, <<, >>
- 6. Identity operator: is, is not
- 7. Membership operator: in, not in

PRACTICAL:

Write a program to read student ID,name and 3 subject marks, total marks and percentage

#1. ARITHMETIC OPERATORS

#Take 2 inputs from the user and perform all arithmetic operations and print all the outputs

#Method 1

a=float(input("Enter the first number:"))

b=float(input("Enter the second number:"))

c=a+b

d=a-b

e=a*b

f=a/b

g=a%b

```
h=a**b
```

```
i=a//b
```

```
print("Addition={}\nSubtraction={}\nMultiplication={}\nDivision={}\nMod={}\nExponent={}\nFloor Division={}".format(c,d,e,f,g,h,i))
```

```
#Method 2
```

```
a=float(input("Enter the first number:"))
```

```
b=float(input("Enter the second number:"))
```

```
print(f"The sum of {a} and {b} is {a+b}\nThe diff of {a} and {b} is {a-b}\nThe multiplication of {a} and {b} is {a*b}\nThe division of {a} and {b} is {a/b}\nThe mod of {a} and {b} is {a%b}\nThe Exponent of {a} and {b} is {a**b}\nThe Floor division of {a} and {b} is {a//b}")
```

#2.RELATIONAL OPERATOR

```
x=15
```

```
y=50
```

```
print(x<y)
```

```
print(x>y)
```

```
print(x==y)
```

```
print(x!=y)
```

```
print(x<=y)
```

```
print(x>=y)
```

#3.LOGICAL OPERATOR

```
a=7
```

```
b=8
```

```
print(a!=10 and b<10)
```

```
print(a>10 and b<10)
```

```
print(a>10 or b<10)
```

```
print(a==10 or b>10)
```

```
not(True):FALSE
```

```
not(False):TRUE
```