

OPERATORS

BINARY OPERATORS

→ require two operands.

→ ARITHMETIC OPERATORS

→ +, -, *, /, //, %, **

→ ASSIGNMENT OPERATORS

= Assignment

*= Assign pdt

/= Assign quotient

%= Assign Remainder

+= Assign sum

**= Assign Exponent

-= Assign diff.

//= Assign floor division

→ Relational operators → <, >, <=, >=, ==, !=

→ Identity operators → is, is not

→ Bitwise operators → & Bitwise AND; ^ Bitwise exclusive OR (XOR)
| Bitwise OR.

→ Shift operators → << shift left; >> shift Right.

→ Logical operators → OR, AND, NOT

→ Membership operators → in, not in.

CONDITIONAL STATEMENTS→ THE if statement

```

if <conditional expression>:
    statement
    [statements]
  
```

n = int(input())

if n > 0:

print(f'{n} is a positive number')

print('statement outside the cond')

#

x = 1

total = 0

start of if statement

if x != 0:

total += x

print(total) → end of if statement

print("This is always executed")

→ The if-else statement

```
# n=int(input())  
if n>0:  
    print('Positive')  
else:  
    print('Not Positive')  
print("This statement always execute")
```

Prog. to find Area of a Triangle

```
# a=5  
# b=7  
# c=4  
a=float(input('enter first side:'))  
b=float(input('enter 2nd side:'))  
c=float(input('enter 3rd side:'))  
s=(a+b+c)/2 # semiperimeter  
area=(s*(s-a)*(s-b)*(s-c))**0.5  
print('area of the triangle is', area)
```

Swap two variables.

```
x=2  
y=5  
temp=x  
x=y  
y=temp
```

```
print('the value of x after swapping: {}'.format(x))  
print('the value of y after swapping: {}'.format(y))
```

→ The if-elif statements

→ Nested if statements

```
# num1=1.5  
num2=6.5 # (Place holder)  
sum=num1+num2  
print('The sum of {0} and {1} is {2}'.format(num1, num2, sum))
```

check if even or odd

```
n=int(input('Enter no. '))  
if num%2==0:  
    print('even')  
    print("{0} is even".format(n))  
else:  
    print("{0} is odd".format(n))
```