```
a = 5
b = 9
#Arithmetic operators
add = a + b
sub = a - b
mul = a * b
div = b / a
mod = b % a
p = a ** b
print(add)
print(sub)
print(mul)
print(div)
print(mod)
print(p)
```

```
14
-4
45
1.8
4
1953125
```

```
#Comparison operators
print(a<b)
print(a<=b)
print(a>b)
print(a>=b)
print(a!=b)
print(a==b)
```

```
True
True
False
False
True
False
```

```
#Logical operators
print(a and b)
print(a or b)
print(not a)
```

```
9
5
False
```

```
#bitwise operators
a = 10
b = 4
print(a & b)
print(a | b)
print(~a)
print(a ^ b)
print(a >> 1)
print(a << 4)
```

```
0
14
-11
14
5
160
```

```
a = 10
b = a
a+=a
print(a)# a = a+a
b-=a
print(b)#b = b -a
b*=a
print(b)
b<<=a
print(b)
```

```
20
-10
-200
```

```
-209715200
```

```
#identity operators
a = 5
b = 2
c = a
print(a is not b)
print(a is c)
```

```
True
True
```

```
#Membership operators
x = 3
y = 5
li = [1,3,6,8,2]
if(x in li):
    print(x)
if(y in li):
    print("y is not present")
```

```
3
```

```
#operator precedence
a = 10 + 20 * 30
print(a)

name = "Dinesh"
age = 29

if name == "Dinesh" or name == "Kumar" and age >= 20:
    print("Hello Dinesh")
else:
    print("Bye")
```

```
610
Hello Dinesh
```

```
#operator overloading
print(1+2)
print("Dinesh"+"Kumar")
print("python"*3)
```

```
3
DineshKumar
pythonpythonpython
```

DATA TYPES

```
#Strings

x = "My class is Python"
y = 'Python Class'
z = '''My class in weekend'''
print(x, y,)
```

```
My class is Python Python Class
```

```
#access the string
print(x[5])
print(y[0])
print(z[-3])
```

```
a
P
e
```

```
#reversing the string
print(x[::-1])
q = "".join(reversed(x))
print(q)
```

```
nohtyP si ssalc yM
nohtyP si ssalc yM
```

```
#Slicing
print(x[0:8])
print(y[3:-2])
```

```
My class
hon Cla
```

```
x = "Dinesh is Python lead"
print(x)

li1 = list(x)
li1[6:10] = "Kumar"
a = ''.join(li1)
print(a)
```

```
Dinesh is Python lead
DineshKumarPython lead
```

```
x = a[0:4]+a[8:]
print(x)
del x
print(x)
```

```
DinemarPython lead


NameError: name 'x' is not defined
```