In [ ]:

```
print("Hello World")
```

```
Hello World
```

In [ ]:

```
"India is my country"
```

Out[ ]:

```
'India is my country'
```

In [ ]:

```
v="India is my country "
v
```

Out[ ]:

```
'India is my country'
```

In [ ]:

```
type(5)
```

Out[ ]:

```
int
```

In [ ]:

```
type(8.89)
```

Out[ ]:

```
float
```

In [ ]:

```
5 + 10
```

Out[ ]:

```
15
```

In [ ]:

```
v +str(5)
```

Out[ ]:

```
'India is my country5'
```

In [ ]:

```
type(True)
```

Out[ ]:

```
bool
```

In [ ]:

```
4 > 3
```

Out[ ]:

```
True
```

In [ ]:

In [ ]:

```
v= " tiger"
```

In [ ]:

```
v
```

Out[ ]:

```
' tiger'
```

[link text]

In [ ]:

```
v[::1]
```

Out[ ]:

```
' tiger'
```

In [ ]:

```
print("Hello world")
```

```
Hello world
```

In [ ]:

```
print("India is great")
```

```
India is great
```

In [ ]:

```
t1 = "India is my country"
```

In [ ]:

```
t1
```

Out[ ]:

```
'India is my country'
```

In [ ]:

```
v1 = "My name is gaurav"
```

In [ ]:

```
v1
```

Out[ ]:

```
'My name is gaurav'
```

In [ ]:

```
v2 = "India is great"
```

In [ ]:

```
v2
```

Out[ ]:

```
'India is great'
```

In [ ]:

```
type(5)
```

Out[ ]:

```
int
```

In [ ]:

```
type(7.89)
```

Out[ ]:

```
float
```

In [ ]:

```
t = 6
```

In [ ]:

```
t
```

Out[ ]:

```
6
```

In [ ]:

```

```

#SLICING

In [ ]:

```
a = "Chennai"
```

In [ ]:

```
a
```

Out[ ]:

```
'Chennai'
```

In [ ]:

```
a = "Chennai"
```

In [ ]:

```
a
```

Out[ ]:

```
'Chennai'
```

In [ ]:

```
a[0]
```

Out[ ]:

```
'C'
```

In [ ]:

```
a[6]
```

Out[ ]:

```
'i'
```

In [ ]:

```
a[0:1000]
```

Out[ ]:

```
'Chennai'
```

In [ ]:

```
a[::4]
```

Out[ ]:

```
'Cn'
```

In [ ]:

```
a[::5]
```

Out[ ]:

```
'Ca'
```

In [ ]:

```
a[::0]
```

```
---------------------------------------------------------------------------
ValueError                                Traceback (most recent call last)
<ipython-input-27-7ec8febe9a5b> in <cell line: 1>()
----> 1 a[::0]

ValueError: slice step cannot be zero
```

In [ ]:

```
a[::3]
```

Out[ ]:

```
'Cni'
```

In [ ]:

```
a[-2]
```

Out[ ]:

```
'a'
```

In [ ]:

```
a[-5]
```

Out[ ]:

```
'e'
```

In [ ]:

```
a[-1:-2:1]
```

Out[ ]:

```
''
```

In [ ]:

```
a[-1:-2:-2]
```

Out[ ]:

```
'i'
```

In [ ]:

```
a[1:3:6]
```

Out[ ]:

```
'h'
```

In [ ]:

```
b = "Patna"
```

In [ ]:

```
b
```

Out[ ]:

```
'Patna'
```

In [ ]:

```
b[-1:-5:-1]
```

Out[ ]:

```
'anta'
```

In [ ]:

```
b[-1:-5:-2]
```

Out[ ]:

```
'at'
```

Python Keywords

In [ ]:

```
help("keywords")
```

```
Here is a list of the Python keywords.  Enter any keyword to get more help.

False               class               from                or
None                continue            global              pass
True                def                 if                  raise
and                 del                 import              return
as                  elif                in                  try
assert              else                is                  while
async               except              lambda              with
await               finally             nonlocal            yield
break               for                 not
```

PRINT STATEMENTS

In [ ]:

```
print("Hello World","My Name is Gaurav")
```

```
Hello World My Name is Gaurav
```

In [ ]:

```
print("Hello World","How are you",sep="-")
```

```
Hello World-How are you
```

In [ ]:

```
print("Hello World",end="*")
print("All are good")
```

```
Hello World*All are good
```

In [ ]:

```
print ('Will', 'this code', 'work?')
```

```
Will this code work?
```

In [ ]:

```
print ('*', '*','*','*', end='-')
```

```
* * * *-
```

In [ ]:

```
print('Hello World')
```

```
Hello World
```

In [ ]:

```
print("Will","this code","work?")
```

```
Will this code work?
```

In [ ]:

```
print('Hello')
print('Currently you are learning print function')
print('How is it going')
```

```
Hello
Currently you are learning print function
How is it going
```

In [ ]:

```
print('Hello', end=',')
print('Currently you are learning print function', end='\n\n')
print('How is it going')
```

```
Hello,Currently you are learning print function

How is it going
```

In [ ]:

```
print("Hello World")
var_1=2
print(var_1)
```

```
Hello World
2
```

In [ ]:

```

```

In [ ]:

```

```

In [ ]:

```
dollar_to_rs=79.87
dollar_amount=130
rs=dollar_to_rs*dollar_amount
```

In [ ]:

```
print(rs)
```

```
10383.1
```

In [ ]:

```
dollar_to_rs=81.25
dollar_amount= 160
rs = dollar_to_rs*dollar_amount
```

In [ ]:

```
print(dollar_amount, "$ per rupees as per coversion rate (",dollar_to_rs,") is",rs)
```

```
160 $ per rupees as per coversion rate ( 81.25 ) is 13000.0
```

In [ ]:

```
_variable2=67
```

In [ ]:

```
x=4
X="sally"
```

In [ ]:

```
x
```

Out[ ]:

```
4
```

In [ ]:

```
d,f,f= 5,3.2,"Invaders"
print(a,b,c)
```

```
5 Patna Invaders
```

In [ ]:

```
a=5
c=3.2
b=0
```

In [ ]:

```
a,c,c= 5,3.2,"invaders"
print(a,c,c,sep="-")
```

```
5-invaders-invaders
```

In [ ]:

```
help("keywords")
```

```
Here is a list of the Python keywords.  Enter any keyword to get more help.

False               class               from                or
None                continue            global              pass
True                def                 if                  raise
and                 del                 import              return
as                  elif                in                  try
assert              else                is                  while
async               except              lambda              with
await               finally             nonlocal            yield
break               for                 not
```

In [ ]:

```
_init=4
```

In [ ]:

```
raining = "Yes"
if raining == "Yes" :
  print("Take Umbrella")
else :
  print("Take Sunglasses")
```

```
Take Umbrella
```

In [ ]:

```
print("First")
print("Second")
i = 6
if (i==5) :
  print("Third")
  print("fourth")
else :
    print("Five")
print("Six")
```

```
First
Second
Five
Six
```

In [ ]:

```
(     )
if X == "Ten" :
 print(X)
```

```
Ten
```

In [ ]:

```
print("Hello World",",","How are you",end="\n\n")
print("All are good?")
```

```
Hello World , How are you

All are good?
```

In [ ]:

```
dollar_to_rs=80.45
dollar_amount=200
rs_amt=dollar_to_rs*dollar_amount
```

In [ ]:

```
rs_amt
```

Out[ ]:

```
16090.0
```

In [ ]:

```
print(dollar_amount,"$ as per conversion of (", dollar_to_rs, ") is", rs_amt)
```

```
200 $ as per conversion of ( 80.45 ) is 16090.0
```

BOOLEAN

In [ ]:

```
bool(0)
```

Out[ ]:

```
False
```

In [ ]:

```python
a = False
b = False
c = False
print ("Output 1: ", a or b or c)
```

```
Output 1:  False
```

In [ ]:

```python
b = True


print ("Output 3: ", a and b and c)
```

```
Output 3:  False
```

In [ ]:

```python
a = True
c = True
print ("Output 4: ", a and b and c)
print ("Output 5: ", (a and b) or c)
```

```
Output 4:  True
Output 5:  True
```

In [ ]:

```python
a = False
print ("Output 6: ", a and b (or c)
```

```
  File "<ipython-input-49-6338fe86522e>", line 2
    print ("Output 6: ", a and b (or c)
                                  ^
SyntaxError: invalid syntax
```

NUMBERS

In [ ]:

```python
num1 = "Tom"
type(num1)

num5 = 9
type(num5)
```

Out[ ]:

```
int
```

In [ ]:

```python
#Addition
a = 8
b = 5
c = a+b
c
print("Addition-",c)
```

```
Addition- 13
```

In [ ]:

```python
#Calculations:----
```

```
a = 8
b = 5
c = a+b
c
print("Addition-",c)

a = 8
b = 5
c = a-b
c
print("Subtraction-",c)

a = 40
b = 5
c = a/b
c
print("Division-",c)

a = 40
b = 5
c = a//b
c
print("Floor Division-",c)

a = 40
b = 12
c = a*b
c
print("Multiplication -",c)

c = a % b
print("Modulus:",c)

c = a ** b
print("Exponent-",c)  ##eg 2 raise to power 3 gives 8 given below

#eg:--
n = 2
m = 3
p = n ** 3
print("Exponent-",p)
```

```
Addition- 13
Subtraction- 3
Division- 8.0
Floor Division- 8
Multiplication - 480
Modulus: 4
Exponent- 16777216000000000000
Exponent- 8
```

In [ ]:

```
num1 = 0.8
num2 = 0.4567

print(type(num1))
print(type(num2))


num = 16/8

print(num)
print(type(num))

num = 16//8

print(num)
print(type(num))
```

```
<class 'float'>
```

```
<class 'float'>
2.0
<class 'float'>
2
<class 'int'>
```

In [ ]:

```
##Implicit and Explicit conversion

num1 = 5                ###Whenever we are adding any float value the result we get is float
num2 = 3.4
num3 = 5 + 3.4

num4 = 5
num5 = 3.4
num7 = 5 *3.4

print(type(num1))
print(type(num2))
print("addition",num3)
print("Multiplication",num7)   ##implicit conversion

##Condition if we want to convert float value to int or vice versa we use int/float function

num4 = 5                  #Explicit conversion
num5 = 3.4
print(type(num1))
print(type(num2))

int(num5)  #Similarly for float
```

```
<class 'int'>
<class 'float'>
addition 8.4
Multiplication 17.0
<class 'int'>
<class 'float'>
```

Out[ ]:

```
3
```

In [ ]:

```
minutes = 60

 type(minutes)
```

Out[ ]:

```
int
```

In [ ]:

```
bool(2.5)
```

Out[ ]:

```
True
```

In [ ]:

```
a = 13
b = 6.5

print ("Output 1: ", a/b * 1.0)
print("Output 2: ", float (a/b))
print("Output 3: ", (int (a)/b))
```

```
print ("Output 1: ", float (a/b))
print("Output 2: ", a/float (b))
print("Output 3: ", a/int (b))
```

```
Output 1:  2.0
Output 2:  2.0
Output 3:  2.0
Output 1:  2.0
Output 2:  2.0
Output 3:  2.1666666666666665
```

In [ ]:

```
###STRING##

company =('Apple Inc.Newyork USA')

print("Apple Inc.\'Newyork\' USA")

##Accessed String

company2 =("Coding Invaders")
print(company2[-1])
print(company2[12])
print(company2[5])
```

```
Apple Inc.'Newyork' USA
s
e
g
```

In [ ]:

In [ ]: