In [ ]:
```
- they never practice

- they will never listen 100%

- i did not undestand

- ds suitable for you

-
```

In [2]:
```
number1=100
number2=200
number1   # 100 is not coming
number2   # 200 is latest so it is coming
```

Out[2]:
```
200
```

In [ ]:
```
# in order to if you want to see both answers
# print
```

In [3]:
```
number1=100  # 100 is saved in a variable number1
number2=200  # 200 is saved in a variable number2
print(number1) # print the value of number1 =100
print(number2) # print the value of number2=200
```

```
100
200
```

In [7]:
```
print('hello')  # step-1:  hello
print('how')    # step-2:  how
print('are')    # step-3: are
print('you')    # step-4: you
print(hello)    # step-5: hello is variable , is hello intoalised above
print(number1)

# python is a step - step
# Name error:  Name hello not defined
```

```
hello
how
are
you
---------------------------------------------------------------------------
-
NameError                                 Traceback (most recent call las
t)
Cell In[7], line 5
      3 print('are')    # step-3: are
      4 print('you')    # step-4: you
----> 5 print(hello)    # step-5: hello is variable , is hello intoalised
above
      6 print(number1)

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

In [ ]:
```
# you written 500 lines of code
# you got error at 200 line
# after 200 line, 201 to 500 will not execute
```

In [8]:
```
print(number1,number2) # 100,200
```

```
100 200
```

In [9]:
```
print(number1)
print(number2)
```

```
100
200
```

In [10]:
```
print(number1)
print('-------')
print(200)
print('**********')
```

```
100
-------
200
**********
```

In [11]:
```
print('hai','how','are','you')
print('hai how are you')
```

```
hai how are you
hai how are you
```

**joining multiple print statements**

In [12]:
```
print('hai' , 'how')
```

```
hai how
```

*end*

In [20]:
```
print('hai',end='----->')
print('how')
```

```
hai----->how
```

In [28]:
```
print('hai ',end='and')
print(' how')
```

```
hai and how
```

In [29]:
```
print('how',end='')
```

```
how
```

In [31]:
```
print('1',end=' ')
print('2',end=' ')
print('3')
```

```
1 2 3
```

In [38]:
```
number1=200
number2=400
add=number1+number2
print("the addition of number1 and number2 is",add)
```

```
the addition of number1 and number2 is 60
```

In [41]:
```
# the addition of 200 and 400 is 600
print("the addition of 20 and 40 is 60")
```

```
the addition of 20 and 40 is 60
```

In [44]:
```
number1=2000
number2=4000
add=number1+number2
print("the addition of 20 and 40is",add)
# how add value is priniting automatically
# in the same way the value also shoudl print
```

```
the addition of 20 and 40is 6000
```

In [53]:
```
num1=2000
num2=4000
add=num1+num2
print("the addition of",num1,"and",num2,"is",add)
```

```
the addition of 2000 and 4000 is 6000
```

In [ ]:
```
# the addition of 20 and 40 is 60
```

In [61]:
```
# Step-1: variable name ='python'
# step-2:          city='Hyd'
# step-3           age=10

# my name is python, I came from hyd and Im 10 years old
name="python"
city="hyd"
age=10
print("my name is",name,'Im from',city,'and im',age,'old')
```

```
my name is python Im from hyd and im 10 old
```

In [65]:
```
# my name is python, I came from hyd and Im 10 years old
name="python"
city="hyd"
age=10
print("my name is",name,'Im from',city,end=' and ')
print("im",age,'years old')
```

```
my name is python Im from hyd and im 10 years old
```

In [ ]:
```
name='python'
city='hyd'
age=10
print('my name is ',name ,'i came from',city ,'i am',age ,'yers old')
```

In [ ]:
```
num1=2000
num2=4000
add=num1+num2
print("the addition of",num1,"and",num2,"is",add)
```

In [ ]:
```
# "the addition of 200 and 400 is 600"
# the addition of {} and {} is {}
```

In [67]:
```
num1=200
num2=400
add=num1+num2
print("the addition of {} and {} is {}".format(num1,num2,add))
```

```
the addition of 200 and 400 is 600
```

In [70]:
```
name='python'
city='hyd'
age=10
print("my name is {}, im from {} and my age is {} year old".format(age,city
```

```
my name is 10, im from hyd and my age is python year old
```

In [ ]:
```
# step-1:  value1=20
# step-2:  value2=30
# step-3:  add=value1+value2
# step-4:  sub=value1-value2
# step-5:  mul=value1*value2
# step-6:  div=value1/value2
#The addition of 20 and 30 is:50
#The subtraction 20 and 30 is: -10
#The multiplication of 20 and 30 is:600
#The division of 20 and 30 is : 0.66666
```

In [72]:
```
val1 = 200
val2 = 300
add = val1+val2
sub = val1-val2
mul = val1*val2
div = round(val1/val2,2)
print('The addition of {} and {} is {}'.format(val1,val2,add))
print('The subtraction of {} and {} is {}'.format(val1,val2,sub))
print('The multiplication of {} and {} is {}'.format(val1,val2,mul))
print('The division of {} and {} is {}'.format(val1,val2,div))
```

```
The addition of 200 and 300 is 500
The subtraction of 200 and 300 is -100
The multiplication of 200 and 300 is 60000
The division of 200 and 300 is 0.67
```

In [75]:
```
value1=20
value2=30
add=value1+value2
sub=value1-value2
mul=value1*value2
div=value1/value2
print("The addition of {} and {} is {}".format(value1,value2,add))
print("The Substraction of {} and {} is {}".format(value1,value2,sub))
print("The multiplication of {} and {} is {}".format(value1,value2,mul))
print("The division of {} and {} is {}".format(value1,value2,div))
```

```
The addition of 20 and 30 is 50
The Substraction of 20 and 30 is -10
The multiplication of 20 and 30 is 600
The division of 20 and 30 is 0.6666666666666666
```

In [78]:
```
round(value1/value2,3)
```

Out[78]:
```
0.667
```

In [79]:
```
20/30    #  /  division
```

Out[79]:
```
0.6666666666666666
```

In [ ]:
```
20%30    # %  modulus
```

In [ ]:
```
20//30  # floor division
```

In [80]:
```
5//2
```

Out[80]:
```
2
```

In [81]:
```
5%2
```

Out[81]:
```
1
```

In [82]:
```
print(5/2) # division
print(5//2) # floor division = qutioent
print(5%2) # modulus = reminder
```

```
2.5
2
1
```

In [84]:
```
val1 = 200  # manually  i provide
val2 = 300  # i provided
add = val1+val2
print("The addition of {} and {} is {}".format(val1,val2,add))
```

```
The addition of 200 and 300 is 500
```

*input*

In [93]:
```
input()
```

```
300
```

Out[93]:
```
'300'
```

In [94]:
```
input("enter a number")
```

```
enter a number300
```

Out[94]:
```
'300'
```

In [96]:
```
input("enter some name:")
```

```
enter some name:apple
```

Out[96]:
```
'apple'
```

In [ ]:

In [ ]:
```
name1='Apple'
```

In [101]:
```
name1=input("what is A for:")  # 'Apple'
name2=input("what is B for:")
print(name1)
print(name2)
```

```
what is A for:Apple
what is B for:Ball
Apple
Ball
```

In [99]:
```
print(name1,name2)
```

```
Apple Ball
```

In [ ]:
```
num1=60
num2=80
num1
num2
```

In [102]:
```
num=input("enter number")
```

```
enter number10
```

In [103]:
```
type(num)
```

Out[103]:
```
str
```

In [104]:
```
val1 = input("enter val1:")   # '20'
val2 = input("enter val2:")   #  '30'
add = val1+val2   # '20'+'30'='2030'  # 'A'+'B'='AB'
print("The addition of {} and {} is {}".format(val1,val2,add))
```

```
enter val1:20
enter val2:30
The addition of 20 and 30 is 2030
```

In [106]:
```
val1,val2
```

Out[106]:
```
('20', '30')
```

In [107]:
```
val1+val2
```

Out[107]:
```
'2030'
```

In [108]:
```
'20'+'30'
```

Out[108]:
```
'2030'
```

In [110]:
```
int(val1)
```

Out[110]:
```
20
```

In [111]:
```
val1 = int(input("enter val1:"))  # int('20')=20
val2 = int(input("enter val2:"))  # int('30')=30
add = val1+val2 # 20+30=50
print("The addition of {} and {} is {}".format(val1,val2,add))
```

```
enter val1:20
enter val2:30
The addition of 20 and 30 is 50
```

In [ ]:
```
val1 = input("enter val1:")  # val1='20'
val2 = input("enter val2:")  # val2='30'
add = int(val1)+int(val2)    # int('20')+int('30') =20+30
print("The addition of {} and {} is {}".format(val1,val2,add))
```

In [112]:
```
val1=int(input("Enter val1:"))
val2=int(input("Enter val2:"))
add=val1+val2
```

```
Enter val1:20
Enter val2:30
```

In [118]:
```
num1=int(input("enter a number1:"))
num2=float(input("enter number2:"))
print(num1+num2)
```

```
enter a number1:200.5

---------------------------------------------------------------------------
-
ValueError                                Traceback (most recent call las
t)
Cell In[118], line 1
----> 1 num1=int(input("enter a number1:"))
      2 num2=float(input("enter number2:"))
      3 print(num1+num2)

ValueError: invalid literal for int() with base 10: '200.5'
```

In [ ]:
```
int('200')--- works
int('200.5')--- fail
float('200')==works
float('200.5')==works
```

*eval*

In [121]:
```
num1=eval(input("enter a number1:"))
num2=eval(input("enter number2:"))
print(num1+num2)
```

```
enter a number1:100
enter number2:100.5
200.5
```

In [123]:
```
type(num2)
```

Out[123]:
```
float
```

In [ ]:
```
int('200.5')  # fail
```

In [ ]:
```
v1=input('enter v1:')          # v1 str
v2=int(input('enter v2:'))     # v2 int
v3=float(input('enter v3:'))   # v3 float
v4=eval(input('enter v4'))     # v4 === depends on provided value
```

In [127]:
```
v4=eval(input('enter v4'))
print(type(v4))
```

```
enter v4apple

---------------------------------------------------------------------------
NameError                                 Traceback (most recent call las
t)
Cell In[127], line 1
----> 1 v4=eval(input('enter v4'))
      2 print(type(v4))

File <string>:1

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

In [ ]:
```
# Eval concept
val1 = 200
val2 = 300
add = val1+val2
sub = val1-val2
mul = val1*val2
div = round(val1/val2,2)
print('The addition of {} and {} is {}'.format(val1,val2,add))
print('The subtraction of {} and {} is {}'.format(val1,val2,sub))
print('The multiplication of {} and {} is {}'.format(val1,val2,mul))
print('The division of {} and {} is {}'.format(val1,val2,div))
```

In [ ]:
```
# take three numbers
# a
# b
# c  from the key board
# find the sum and average
```

In [ ]:
```

```