Print

```
In [1]: a=10
        b=20
        b
Out[1]: 20
In [2]: a=10
        b=20
        print(a)
        print(b)
       10
       20
In [3]: print(10)
        print(10,20)
        print('python')
        print(10,20,'python')
       10
       10 20
       python
       10 20 python
In [4]: num1=20
        num2=30
        add=num1+num2
        print(add)
       50
```

print result with string

```
In [5]: num1=20
    num2=30
    add=num1+num2
    print('The addition of',num1,'add',num2,'is=',add)

The addition of 20 add 30 is= 50

In [6]: name='Python'
    age=20
    city='hyd'

In [7]: print('My name is',name,'and i am',age,'years old from',city)
    My name is Python and i am 20 years old from hyd
```

print format method

```
In [8]: num1=20
         num2=30
         add=num1+num2
         print('The addition of {} and {} is= {}'.format(num1,num2,add))
        The addition of 20 and 30 is= 50
In [10]: name='Python'
         age=20
         city='hyd'
         print('hello my name is {}, and i am {} years old from {}'.format(name,age,city)
        hello my name is Python, and i am 20 years old from hyd
In [12]:
        num1=100
         num2=25
         num3=333
         avg=(num1+num2+num3)/3
         avg1=round((num1+num2+num3)/3,2)
         print('The average of {}, {}, and {} is= {} or {}'.format(num1,num2,num3,avg,avg
        The average of 100, 25, and 333 is= 152.666666666666 or 152.67
In [13]: round(avg,2)
Out[13]: 152.67
```

More short format method(f string method)

```
In [14]: num1=20
         num2=30
         add=num1+num2
         print(f'The addition of {num1} and {num2} is= {add}')
        The addition of 20 and 30 is= 50
In [15]: name='Python'
         age=20
         city='hyd'
         print(f'hello my name is {name}, and i am {age} year old, from{city}.')
        hello my name is Python, and i am 20 year old, fromhyd.
In [16]:
        num1=100
         num2=25
         num3=333
         avg=round((num1+num2+num3)/3,2)
         print(f'The average of {num1},{num2} and {num3} is= {avg}')
        The average of 100,25 and 333 is= 152.67
In [17]: num1=20
         num2=20
         add=num1+num2
         print('The addition of', num1, 'and', num2, 'is=', add)
         print('The addition of {} and {} is= {}'.format(num1,num2,add))
         print(f'The addition of {num1} and {num2} is= {add}')
```

```
The addition of 20 and 20 is= 40 The addition of 20 and 20 is= 40 The addition of 20 and 20 is= 40
```

end statement

```
In [18]: print('hello')
    print('good morning')

hello
    good morning

In [19]: print('hello',end=' ')
    print('world good day')

hello world good day
```

separator

```
In [20]: print('hello', 'hi', 'how are you', sep='--->')
    hello--->hi--->how are you

In [21]: print('hello', 'hi', 'how are you', sep='&')
    hello&hi&how are you

In [22]: print('hello', 'hi', 'how are you', sep='@')
    hello@hi@how are you

In [23]: print('hello', 'hi', 'how are you', sep=' ')
    hello hi how are you

In [24]: print(3,'.', sep='')
    3.

In [25]: print(1,2,end=' ')
    print(3,'.', sep='')
    1 2 3.
```

variable

```
In []: age=25
  print(age)

In [27]: name='Alice'
  print(name)
    Alice

In [28]: price=19.99
  print(price)
```

```
In [29]: is_active=True
print(is_active)
```

True

1. Storing and Printing value

```
In [1]: x=10
print(x)
10
```

2. Using variables in Expressions

```
In [2]: a=5
b=3
result=a+b
print(result)
```

3. Changing the value of a variable

initial value

```
In [3]: score=50
    print(score)

50
    changing the value of 'score'

In [4]: score=100
    print(score)
```

100

4.concetanening Strings

assigning values to variables

```
In [5]: first_name='John'
    last_name='Doe'

full_name=first_name + ' ' +last_name
    print(full_name)
```

John Doe

5. Using variables in a calculation

```
In [6]: length=10 #assigning values to variables
         width=5
          area=length*width #calculating the area of a rectangle
         print(area)
        50
In [36]: #Reassigning values to variables
         x=10 #initial value of x
         print(x)
        10
In [37]: x=20 #reassigning the value of x
         print(x)
        20
In [26]: import keyword
          keyword.kwlist
Out[26]: ['False',
           'None',
           'True',
           'and',
           'as',
           'assert',
           'async',
           'await',
           'break',
           'class',
           'continue',
           'def',
           'del',
           'elif',
           'else',
           'except',
           'finally',
           'for',
           'from',
           'global',
           'if',
           'import',
           'in',
           'is',
           'lambda',
           'nonlocal',
           'not',
           'or',
           'pass',
           'raise',
           'return',
           'try',
           'while',
           'with',
           'yield']
```

```
In [ ]:
In [10]: i=30
         i
Out[10]: 30
In [11]: type(i)
Out[11]: int
In [12]: f=100.2
Out[12]: 100.2
In [13]: type(f)
Out[13]: float
In [14]: f1=1e0
         f1
Out[14]: 1.0
In [15]: f2=1e1
         f2
Out[15]: 10.0
In [16]: f3=1E2
         f3
Out[16]: 100.0
In [17]: a=10
         b=20
In [18]: a + b
         a - b
         a * b
         a / b
Out[18]: 0.5
In [19]: print(a+b)
         print(a-b)
         print(a*b)
         print(a/b)
        30
        -10
        200
        0.5
In [20]: num1=20
         num2=30
```

```
add=num1+num2
         print('The addition of two number',num1,'and',num2,'is=',add)
        The addition of two number 20 and 30 is= 50
In [21]: num1=20
         num2=30
         add=num1+num2
         print('The addition of {} and {} is= {}'.format(num1,num2,add))
        The addition of 20 and 30 is= 50
In [22]: num1=20
         num2=30
         num3 = 40
         add=num1+num2+num3
         print('The addition of {} and {} is= {}'.format(num1,num2,num3,add))
        The addition of 20 and 30 and 40 is= 90
In [23]: c = 1 + 2j
         С
Out[23]: (1+2j)
In [25]: type(c)
Out[25]: complex
In [38]: c=1+2j
         c.real
Out[38]: 1.0
In [39]: c.imag
Out[39]: 2.0
In [40]: c=5+10j
         d=10+20j
         print(c+d)
         print(c-d)
        (15+30j)
        (-5-10j)
In [41]: b=True
Out[41]: True
In [44]: b1=True
Out[44]: True
```

```
In [45]: b2=False
b2
Out[45]: False
In [48]: int(True)
Out[48]: 1
In [47]: int(False)
Out[47]: 0
In [49]: True+True
Out[49]: 2
In [7]: True-False
Out[7]: 1
In [8]: False-True
Out[8]: -1
In [9]: True-True*False+False
Out[9]: 1
In [9]: True-True*False+False
```