

# Basic

In [ ]: *#😄😄in R programming index is starting from "1" ,but in Python index is starting fr*

In [17]: `5+5`

Out[17]: `10`

In [2]: `30+25`

Out[2]: `55`

In [4]: `X=20  
Y=30  
Z=X+Y`

In [5]: `Z`

Out[5]: `50`

In [7]: `print(X)  
print(Y)  
print(Z)`

`20`

`30`

`50`

In [ ]: *#😄😄add 20 to the multiplication of 100 and 200*

In [11]: `abc=20+(100*200)`

In [12]: `abc`

Out[12]: `20020`

## conditional statements

In [ ]: *#😄😄if x is divisible by 2  
#😄😄any thing rejected by "if" is taken by "else" .*

In [14]: `x=6  
if x%2==0:  
 print("number is even")  
else:  
 print("number is not even")`

`number is even`

In [ ]: *#😄😄take a number 100 if the number is equal to 100 then print "hello world" other*

```
In [15]: y=50
         if y==100:
             print("hello world")
         else:
             print("bye bye")
```

bye bye

In [19]: # 😊😊 what ever may rejected by "if" it taken by "elif" and what evr may rejected by

```
In [21]: x=100
         if x>0:
             print("positive")
         elif x==0:
             print("zero")
         else:
             print("negative")
```

positive

## List

# 😊😊 List-- collection of element , list are use in data frame. # 😊😊 list always use "square bracket" [] .

```
In [22]: li1=["hello","hi","bye bye"]
```

```
In [23]: li1[0]
```

Out[23]: 'hello'

```
In [25]: li1[1]
```

Out[25]: 'hi'

```
In [26]: li1[2]
```

Out[26]: 'bye bye'

```
In [24]: li1[0]
         li1[1]
         li1[2]
```

Out[24]: 'bye bye'

```
In [28]: li2=[20,30,40,50,60,70,80,"hi"]
         li2
```

Out[28]: [20, 30, 40, 50, 60, 70, 80, 'hi']

```
In [69]: li3=["apple","kiwi","oranges","banana"]
```

```
In [56]: for i in li3:
         print(i)
```

```
apple  
kiwi  
oranges  
banana
```

```
In [ ]: #"Len" function is for thenght of the List
```

```
In [71]: x=len(li3)
```

```
In [72]: x
```

```
Out[72]: 4
```

```
In [73]: for i in range(x):  
         print(li3[i])
```

```
apple  
kiwi  
oranges  
banana
```

```
In [ ]:
```

## Dictionary

```
In [ ]: # 😊😊 Like in real dictionary we have "word--meaning" ,in python it is "key -value"  
        # 😊😊 here for dictionary we use "Curly brackets" { } .
```

```
In [29]: d1={"key1":100,"key2":200,"key3":300}
```

```
In [30]: d1
```

```
Out[30]: {'key1': 100, 'key2': 200, 'key3': 300}
```

```
In [32]: d1["key1"]
```

```
Out[32]: 100
```

```
In [1]: #Negative index starts from ending & its not from "0 its from"-1" .
```

```
In [ ]:
```

```
In [42]: L1=[10,20,30,40,50,60,70,80,90,100]
```

```
In [5]: L1[2]
```

```
Out[5]: 30
```

```
In [6]: L1[-1]
```

```
Out[6]: 100
```

```
In [10]: L1[-5:-2] #here its starts from -5 but end always before -2
```

```
Out[10]: [60, 70, 80]
```

## Loops

```
In [5]: #loops is something that allows you to do repeatative tasks .  
#loops are 2 types (1) "for loops" and (2)"while loops"
```

## while loops

```
In [15]: x=1  
while(x<10):  
    print("hello world")  
    x=x+1
```

```
hello world  
hello world  
hello world  
hello world  
hello world  
hello world  
hello world  
hello world  
hello world
```

```
In [18]: X=1  
while(X<4):  
    print("hello world")  
    X=X+1  
    print("hi")  
    print("bhabani")
```

```
hello world  
hi  
bhabani  
hello world  
hi  
bhabani  
hello world  
hi  
bhabani
```

```
In [3]: x=1  
while(x<4):  
    print("hello world")  
    x=x+1  
    print("hi")
```

```
hello world  
hi  
hello world  
hi  
hello world  
hi
```

# for loops

```
In [31]: for x in range(4): #Its mean you are looking for the value between 0 and 4
          print("hello world")
```

```
hello world
hello world
hello world
hello world
```

```
In [39]: for x in range(10):
          print("bhabani")
```

```
bhabani
bhabani
bhabani
bhabani
bhabani
bhabani
bhabani
bhabani
bhabani
bhabani
```

```
In [41]: for x in range(1,4):
          print("hello world")
```

```
hello world
hello world
hello world
```

```
In [43]: L1
```

```
Out[43]: [10, 20, 30, 40, 50, 60, 70, 80, 90, 100]
```

```
In [44]: for i in L1: #here i mean any value that i am assigning .
          print(i)
```

```
10
20
30
40
50
60
70
80
90
100
```

```
In [ ]: #if i want to run the Loop for 100 times than i have to write "for i in range (100)"
        # if i want to run all the item in my List than i have to write "for I in L"
        #Range is When ever i want to run my Loop for a certain amount of times.
        #"for i in L"or " for i in List" means when i want to run all the element in my List.
```

```
In [ ]:
```

# Break

In [ ]: *# Break is use when you try to stop execute your loop in the middle .*

In [48]: 

```
for x in range(4):  
    print("hello world")
```

hello world  
hello world  
hello world  
hello world

In [74]: L1

Out[74]: [10, 20, 30, 40, 50, 60, 70, 80, 90, 100]

In [90]: 

```
for i in L1:  
    print(i)  
    if i==50:  
        break
```

10  
20  
30  
40  
50

In [ ]:

In [ ]:

# Continue

In [ ]: *#continue mean skip the number and continue the loop .*

In [89]: 

```
for i in range(5):  
    if i==3:  
        continue  
    print(i)
```

0  
1  
2  
4

In [107... 

```
for i in range(5):  
    if i==3:  
        continue  
    print(i)
```

0  
1  
2  
4

# Methods

```
In [ ]: # methords / function is going to some task or operation that need to be done when eve
```

```
In [110... def Bhabani():  
    print("hello world")  
    print("hi")  
    print("bye bye")
```

```
In [111... Bhabani()  
  
hello world  
hi  
bye bye
```

```
In [ ]: #Methords with parameters
```

```
In [130... def additn(a,b):# here the 10 is taking value in "a" and 20 is thaking the value in "b"  
    c=a+b  
    print("your sum is",c)
```

```
In [131... additn(10,20)  
  
your sum is 30
```

```
In [132... additn(100,200)  
  
your sum is 300
```

```
In [ ]: #print---print something on the screen(display)  
        #return---giving back a value .
```

```
In [133... def add1(a,b):  
    x=a+b  
    return x
```

```
In [134... add1(3,4)
```

```
Out[134]: 7
```

```
In [135... abc=add1(3,4)
```

```
In [138... abc
```

```
Out[138]: 7
```

```
In [136... y=abc+6
```

```
In [137... y
```

```
Out[137]: 13
```

```
In [139... y+abc
```

Out[139]: 20

```
In [11]: def num(b):  
         if b%2==0:  
             print("number is even",b)  
         else:  
             print("number is odd",b)
```

```
In [9]: num(4)  
  
number is even 4
```

```
In [12]: num(5)  
  
number is odd 5
```

```
In [13]: def evod(n):  
         if n%2==0:  
             print(n,"is even")  
         else:  
             print(n,"is odd")
```

```
In [14]: x = int(input("enter a number"))  
  
enter a number25
```

```
In [15]: evod(x)  
  
25 is odd
```

```
In [ ]:
```

```
In [20]: marks = 70  
         if (marks>=60 and marks<80):  
             print("B")  
         else:  
             print("A")
```

B

```
In [22]: marks = 70  
         if (marks==70 or marks==80):  
             print("B")  
         else:  
             print("A")
```

B

```
In [ ]:
```

```
In [ ]:
```

```
In [ ]:
```

```
In [ ]:
```

```
In [ ]:
```



In [ ]:

In [ ]: