

```
In [1]: range(3)
```

```
Out[1]: range(0, 3)
```

```
In [2]: type(range(3))
```

```
Out[2]: range
```

```
In [3]: for i in range(3):  
        print(i)
```

```
0
```

```
1
```

```
2
```

```
In [4]: colors=['red','green','blue']  
        colors
```

```
Out[4]: ['red', 'green', 'blue']
```

```
In [5]: len(colors)
```

```
Out[5]: 3
```

```
In [6]: for i in range(len(colors)):  
        print(colors[i])
```

```
red
```

```
green
```

```
blue
```

```
In [7]: colors[0]
```

```
Out[7]: 'red'
```

```
In [8]: colors[0],colors[1],colors[2]
```

```
Out[8]: ('red', 'green', 'blue')
```

```
In [9]: new_colors=['brown','yellow','black']  
        new_colors
```

```
Out[9]: ['brown', 'yellow', 'black']
```

```
In [10]: colors+new_colors
```

```
Out[10]: ['red', 'green', 'blue', 'brown', 'yellow', 'black']
```

```
In [12]: colors2=colors+new_colors  
        colors2
```

```
Out[12]: ['red', 'green', 'blue', 'brown', 'yellow', 'black']
```

```
In [13]: colors.append('gray')  
        colors
```

```
Out[13]: ['red', 'green', 'blue', 'gray']
```

```
In [14]: colors.append('orange')
         colors
```

```
Out[14]: ['red', 'green', 'blue', 'gray', 'orange']
```

```
In [15]: colors.append('pink')
         colors
```

```
Out[15]: ['red', 'green', 'blue', 'gray', 'orange', 'pink']
```

```
In [18]: squares=[ 1 , 4 , 9 , 16 ] # kareler dizisi
         sum = 0 # toplam
         for num in squares: # döngü değişkeni num
             print(num)
             sum += num # üzerine ekleyerek toplama

         print(f"karelerin toplamı:{sum}") # 30 # toplamı yazdır
```

```
1
4
9
16
karelerin toplamı:30
```

```
In [24]: squares=[]
         sum=0
         count = int(input('kareler dizisinin eleman sayısını giriniz:'))
         for i in range(1,count+1):
             squares.append(i**2)
             sum+=num

         print(squares)
         print(f"karelerin toplamı:{sum}")
```

```
kareler dizisinin eleman sayısını giriniz:6
[1, 4, 9, 16, 25, 36]
karelerin toplamı:96
```

```
In [25]: squares=[]
         sum=0
         count = int(input('kareler dizisinin eleman sayısını giriniz:'))
         for i in range(1,count):
             squares.append(i**2)
             sum+=num

         print(squares)
         print(f"karelerin toplamı:{sum}")
```

```
kareler dizisinin eleman sayısını giriniz:6
[1, 4, 9, 16, 25]
karelerin toplamı:80
```

```
In [27]: # print the numbers from 0 through 99
         for i in range (10):
             print(i,end=' ')
```

```
0 1 2 3 4 5 6 7 8 9
```

```
In [28]: # print the numbers from 0 through 99
         for i in range (1,10,2):
             print(i,end=' ')
```

```
1 3 5 7 9
```

```
In [1]: liste=[] # boş liste oluşturur
# liste=list() # boş liste oluşturur
liste.append('a')
liste.append('b')
liste.append(3)
liste.append(3.14)
liste.append(True)
liste
```

```
Out[1]: ['a', 'b', 3, 3.14, True]
```

```
In [2]: len(liste) # listenin uzunluğu
```

```
Out[2]: 5
```

```
In [3]: liste[-1] # listenin son elemanı
```

```
Out[3]: True
```

```
In [4]: for i in liste:
        print(i)
```

```
a
b
3
3.14
True
```

```
In [5]: for i in range(len(liste)):
        print(liste[i])
```

```
a
b
3
3.14
True
```

```
In [6]: listem=['Hiranur','Sümeýra','Ahmet',3,3.14,True,False]
listem
```

```
Out[6]: ['Hiranur', 'Sümeýra', 'Ahmet', 3, 3.14, True, False]
```

```
In [7]: for i in listem:
        print(i, end=' ')
```

```
Hiranur Sümeýra Ahmet 3 3.14 True False
```

```
In [8]: for i in range(len(listem)):
        print(listem[i],end=' ')
```

```
Hiranur Sümeýra Ahmet 3 3.14 True False
```

```
In [9]: listem[0:2]
```

```
Out[9]: ['Hiranur', 'Sümeýra']
```

```
In [10]: listem[1:3] # liste[1] liste[2]
```

```
Out[10]: ['Sümeýra', 'Ahmet']
```

```
In [11]: listem[1:-1]
```

```
Out[11]: ['Sümeýra', 'Ahmet', 3, 3.14, True]
```

```
In [12]: list = [ 'a' , 'b' , 'c' , 'd' ]  
list
```

```
Out[12]: ['a', 'b', 'c', 'd']
```

```
In [13]: print(list [1:-1])
```

```
['b', 'c']
```

```
In [14]: list[0:2] = 'z'  
list
```

```
Out[14]: ['z', 'c', 'd']
```

```
In [15]: list = [ 'a' , 'b' , 'c' , 'd' ]  
list[0:2]
```

```
Out[15]: ['a', 'b']
```

```
In [16]: list[0:2]='z' # ['a', 'b'] yerine 'z' atar  
list
```

```
Out[16]: ['z', 'c', 'd']
```

```
In [17]: list = [ 'a' , 'b' , 'c' , 'd' ]  
list[1:3]='x'
```

```
In [18]: list
```

```
Out[18]: ['a', 'x', 'd']
```

```
In [19]: list = [ 'a' , 'b' , 'c' , 'd' ]  
list[:]
```

```
Out[19]: ['a', 'b', 'c', 'd']
```

```
In [20]: list[1:]
```

```
Out[20]: ['b', 'c', 'd']
```

```
In [21]: list[:-1]
```

```
Out[21]: ['a', 'b', 'c']
```

```
In [22]: list[1:-1]
```

```
Out[22]: ['b', 'c']
```

```
In [23]: list[1:]
```

```
Out[23]: ['b', 'c', 'd']
```

```
In [1]: list = [ 'larry' , 'curly' , 'moe' ] # dolu bir liste tanımlar
```

```
In [2]: list.append('shemp') # listenin sonuna eleman ekler  
list
```

```
Out[2]: ['larry', 'curly', 'moe', 'shemp']
```

```
In [3]: list.insert(0, 'xxx' ) # 0. indexe 'xxx' elemanını ekler  
list
```

```
Out[3]: ['xxx', 'larry', 'curly', 'moe', 'shemp']
```

```
In [4]: list.extend(['yyy' , 'zzz' ]) ## listenin sonuna yeni listeyi ekler  
list
```

```
Out[4]: ['xxx', 'larry', 'curly', 'moe', 'shemp', 'yyy', 'zzz']
```

```
In [5]: print(list.index('curly')) ## 2
```

```
2
```

```
In [6]: list.remove( 'curly' ) ## 'curly' elemanını arar ve kaldırır  
list
```

```
Out[6]: ['xxx', 'larry', 'moe', 'shemp', 'yyy', 'zzz']
```

```
In [7]: print(list.index('curly')) # 'curly' elemanı olmadığından değer hatası
```

```
-----  
ValueError                                Traceback (most recent call last)  
Cell In[7], line 1  
----> 1 print(list.index('curly'))  
ValueError: 'curly' is not in list
```

```
In [8]: list.index('moe') # 'moe' elemanının indeksi
```

```
Out[8]: 2
```

```
In [9]: list.index('shemp') # 'shemp' elemanının indeksi
```

```
Out[9]: 3
```

```
In [10]: liste = [ 'larry' , 'curly' , 'moe' ]  
liste
```

```
Out[10]: ['larry', 'curly', 'moe']
```

```
In [11]: liste.insert(1, 'sumeyra') # 1. indekse 'sumeyra' eklenir  
liste
```

```
Out[11]: ['larry', 'sumeyra', 'curly', 'moe']
```

```
In [12]: liste.sort() # listeyi sıralar  
liste
```

```
Out[12]: ['curly', 'larry', 'moe', 'sumeyra']
```

```
In [13]: liste = [ 'larry' , 'curly' , 'moe' ]  
liste.sort() # listeyi sıralar  
liste
```

```
Out[13]: ['curly', 'larry', 'moe']
```

```
In [14]: liste = [ 'larry' , 'curly' , 'moe' ]  
liste.reverse() # listeyi ters çevirir  
liste
```

```
Out[14]: ['moe', 'curly', 'larry']
```

```
In [15]: rakam=[2,3,5,7,1,0]  
rakam
```

```
Out[15]: [2, 3, 5, 7, 1, 0]
```

```
In [16]: rakam.sort()  
rakam
```

```
Out[16]: [0, 1, 2, 3, 5, 7]
```

```
In [17]: rakam.reverse()  
rakam
```

```
Out[17]: [7, 5, 3, 2, 1, 0]
```

```
In [18]: type(rakam)
```

```
Out[18]: list
```

```
In [19]: rakam=[2,3,5,7,1,0]  
rakam.sort()  
rakam
```

```
Out[19]: [0, 1, 2, 3, 5, 7]
```

```
In [20]: rakam.reverse()  
rakam
```

```
Out[20]: [7, 5, 3, 2, 1, 0]
```

```
In [21]: rakam=[2,3,5,7,1,0] # dolu bir liste tanımlama  
rakam.sort() # listeyi küçükten büyüğe sıralar  
rakam.reverse() # listeyi ters çevirir  
rakam
```

```
Out[21]: [7, 5, 3, 2, 1, 0]
```