

```
In [1]: 1 s ="My name is Sudhanshu"
```

```
In [2]: 1 s
```

```
Out[2]: 'My name is Sudhanshu'
```

```
In [3]: 1 s[3:10]  # from n to s
```

```
Out[3]: 'name is'
```

```
In [4]: 1 s[3:10:1] #starting point , ending point & step size
```

```
Out[4]: 'name is'
```

```
In [5]: 1 s[3:10:2]
```

```
Out[5]: 'nm s'
```

```
In [6]: 1 s[10:3] # OR s[10:3:1] step size is by default 1 (+ve 1)
```

```
Out[6]: ''
```

```
In [7]: 1 s[10:3:-1]
```

```
Out[7]: ' si ema'
```

```
In [8]: 1 s[10:2:-1]
```

```
Out[8]: ' si eman'
```

```
In [9]: 1 s[10:2:-2]
```

```
Out[9]: ' iea'
```

```
In [10]: 1 s[::-1] # reverse of "My name is Sudhanshu"
```

```
Out[10]: 'uhsnahduS si eman yM'
```

```
In [11]: 1 s[2:-6]
```

```
Out[11]: ' name is Sud'
```

```
In [12]: 1 s1="sudh"
```

```
In [13]: 1 s1[-1]
```

```
Out[13]: 'h'
```

```
In [14]: 1 s1[-2]
```

```
Out[14]: 'd'
```

```
In [15]: 1 # SUDH indexing could be 0,1,2,3 and -4,-3,-2,-1
```

```
In [16]: 1 for i in s:  
2         print(i)
```

M  
y  
  
n  
a  
m  
e  
  
i  
s  
  
S  
u  
d  
h  
a  
n  
s  
h  
u

```
In [17]: 1 for i in s:  
2         if i=='s':  
3             print('I got S as string')  
4             print(i)
```

M  
y  
  
n  
a  
m  
e  
  
i  
I got S as string  
s  
  
S  
u  
d  
h  
a  
n  
I got S as string  
s  
h  
u

```
In [24]: 1 for i in s :
2         if i=="n":
3             break
4         print(i)
5
6     else :
7         if i=='u':
8             print("last char was u")
9             print("this is else condition")
10
11
```

M  
y

```
In [2]: 1 m = "ineuron"
2 mm= ""
3 for i in range(len(m)):
4     if m[i]=="n":
5         continue
6
7     else:
8         mm = mm + m[i]
```

```
In [3]: 1 mm
```

Out[3]: 'ieuro'

```
In [5]: 1 n=7
2 for i in range(0,n):
3     for j in range(0,i+1):
4         print("+", end = "")
5     print("\n")
```

+  
++  
+++  
++++  
+++++  
++++++  
+++++++

```
In [7]: 1 n=int(input("Enter the number of rows:"))
        2 for i in range(n,0,-1):
        3     for j in range(n-i):
        4         print(' ', end='')
        5
        6     for j in range(2*i-1):
        7         print("*",end="")
        8     print()
```

Enter the number of rows:7

```
*****
*****
*****
*****
****
***
**
*
```

In [10]:

```
1 for i in range(0,100,2):  
2     print(i)
```

0  
2  
4  
6  
8  
10  
12  
14  
16  
18  
20  
22  
24  
26  
28  
30  
32  
34  
36  
38  
40  
42  
44  
46  
48  
50  
52  
54  
56  
58  
60  
62  
64  
66  
68  
70  
72  
74  
76  
78  
80  
82  
84  
86  
88  
90  
92  
94  
96  
98

In [5]:

```
1 "b"*5
```

Out[5]: 'bbbbbb'

```
In [7]: 1 "_bhushan_mudliyar_"*5
```

```
Out[7]: '_bhushan_mudliyar__bhushan_mudliyar__bhushan_mudliyar__bhushan_mudliyar__bhushan_mudliyar_'
```

```
In [9]: 1 n=int(input("Enter a num :"))
2 i=0
3 while i<n:
4     print(' '*(n-i-1) + '*'*(i+1))
5     i+=1
```

Enter a num :5

```
      *
     **
    ***
   ****
  *****
```

```
In [ ]: 1 l = list()
```

```
In [1]: 1 l = ["bhushan",34565,"delhi"]
```

```
In [2]: 1 l
```

```
Out[2]: ['sudh', 34565, 'delhi']
```

```
In [3]: 1 l[0]
```

```
Out[3]: 'sudh'
```

```
In [4]: 1 l[1]
```

```
Out[4]: 34565
```

```
In [5]: 1 l[2]
```

```
Out[5]: 'delhi'
```

```
In [6]: 1 type(l)
```

```
Out[6]: list
```

```
In [38]: 1 l=["bhushan",452, "bdJm" , True, 45j+1, ["bhusha1" ,6, 3,5,"jhon", 5.8], 6.3]
```

```
In [40]: 1 l[0:4]
```

```
Out[40]: ['bhushan', 452, 'bdJm', True]
```

```
In [41]: 1 l[8:3]
```

```
Out[41]: []
```

```
In [43]: 1 l[80:3:-1]
```

```
Out[43]: [6.3, ['bhusha1', 6, 3, 5, 'jhon', 5.8], (1+45j)]
```

```
In [39]: 1 for i in l:
2         if type(i)==list:
3             n=0
4             for j in i:
5                 if type(j)==int:
6                     n=n+j
7             print(n)
8
9             print(type(j))
10
```

```
14
<class 'float'>
```

```
In [44]: 1 for i in range(4,10):
2         print(i)
```

```
4
5
6
7
8
9
```

```
In [45]: 1 list(range(10))
```

```
Out[45]: [0, 1, 2, 3, 4, 5, 6, 7, 8, 9]
```

```
In [46]: 1 range(0,10)
```

```
Out[46]: range(0, 10)
```

```
In [ ]: 1
```

```
In [ ]: 1
```