

```
In [1]: a=10
```

```
In [2]: b=8.5
```

```
In [3]: a
```

```
Out[3]: 10
```

```
In [4]: b
```

```
Out[4]: 8.5
```

```
In [5]: 10+20-30*2
```

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

```
In [6]: str="Hello Welcome"
```

```
In [7]: str
```

```
Out[7]: 'Hello Welcome'
```

```
In [8]: str[0]
```

```
Out[8]: 'H'
```

```
In [9]: str[12]
```

```
Out[9]: 'e'
```

```
In [10]: str[-1]
```

```
Out[10]: 'e'
```

```
In [12]: str[0:5]
```

```
Out[12]: 'Hello'
```

```
In [13]: str
```

```
Out[13]: 'Hello Welcome'
```

```
In [18]: str[6:13]
```

```
Out[18]: 'Welcome'
```

str

```
In [19]: str[-7::]
```

```
Out[19]: 'Welcome'
```

```
In [1]: str="hello welcome you all"
```

```
In [2]: str
```

```
Out[2]: 'hello welcome you all'
```

```
In [3]: print(str)
```

```
hello welcome you all
```

```
In [4]: str*2
```

```
Out[4]: 'hello welcome you allhello welcome you all'
```

```
In [5]: str*4
```

```
Out[5]: 'hello welcome you allhello welcome you allhello welcome you allhello welcome you all'
```

```
In [6]: len(str)
```

```
Out[6]: 21
```

```
In [10]: str.find('Hel')
```

```
Out[10]: -1
```

---

```
In [8]: str.find('hello')
Out[8]: 0

In [9]: str
Out[9]: 'hello welcome you all'

In [11]: str.find('come')
Out[11]: 9

In [12]: str.find('welcome')
Out[12]: 6

In [13]: str.find('cse')
Out[13]: -1

In [14]: str
Out[14]: 'hello welcome you all'

In [15]: str.upper()
Out[15]: 'HELLO WELCOME YOU ALL'

In [16]: str.lower()
Out[16]: 'hello welcome you all'

In [17]: str[-3:]
Out[17]: 'all'

In [19]: str[::-2]
Out[19]: 'hlowloeyual'

In [21]: str in ['hello']
Out[21]: False

In [22]: str
Out[22]: 'hello welcome you all'

In [23]: 'Hello' in str
Out[23]: False

In [24]: 'hello' in str
Out[24]: True

In [26]: str[2:len(str)-4+4-4+2-3*2-15]
Out[26]: 'llo welcome you a'

In [29]: for i in range(1,25):
          print(i)
```

```
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
```

```
In [32]: for i in range(1,25,2):
        print(i)
```

```
1
3
5
7
9
11
13
15
17
19
21
23
```

```
In [33]: a=4
```

```
In [40]: for i in range(1,25,a-2+4-3):
        print(i)
```

```
1
4
7
10
13
16
19
22
```

```
In [41]: for i in range(5,100,5):
        print(i)
```

```
5
10
15
20
25
30
35
40
45
50
55
60
65
70
75
80
85
90
95
```

```
In [42]: list1=[12,15,39.54,'Hello',[12,39,25,[34,'Welcome',55],'CSE']]
```

```
In [43]: print(list1)
```

```
[12, 15, 39.54, 'Hello', [12, 39, 25, [34, 'Welcome', 55], 'CSE']]
```

```
In [44]: list1[0]
```

```
Out[44]: 12
```

```
In [45]: list1[3]
```

```
Out[45]: 'Hello'
```

```
In [68]: list1[4][3][1][3:]
```

```
Out[68]: 'come'
```

```
In [54]: list1
```

```
Out[54]: [12, 15, 39.54, 'Hello', [12, 39, 25, [34, 'Welcome', 55], 'CSE']]
```

```
In [59]: list1[4][4][1:]
```

```
Out[59]: 'SE'
```

str

```
In [60]: str
```

```
Out[60]: 'hello welcome you all'
```

```
In [61]: str1='CSE'
```

```
In [62]: str1
```

```
Out[62]: 'CSE'
```

```
In [66]: str+' '+str1
```

```
Out[66]: 'hello welcome you all CSE'
```

```
In [65]: str.replace("welcome","come")
```

```
Out[65]: 'hello come you all'
```

```
In [67]: list1
```

```
Out[67]: [12, 15, 39.54, 'Hello', [12, 39, 25, [34, 'Welcome', 55], 'CSE']]
```

```
In [73]: list1[4][3][1]='come'
```

```
In [74]: list1[4][3][1]
```

```
Out[74]: 'come'
```

```
In [75]: list1
```

```
Out[75]: [12, 15, 39.54, 'Hello', [12, 39, 25, [34, 'come', 55], 'CSE']]
```

```
In [78]: list1.insert(4,'welcome')
```

## list1

```
In [79]: list1
```

```
Out[79]: [12, 15, 39.54, 'Hello', 'welcome', [12, 39, 25, [34, 'come', 55], 'CSE']]
```

```
In [81]: list1.remove('welcome')
```

```
In [82]: list1
```

```
Out[82]: [12, 15, 39.54, 'Hello', [12, 39, 25, [34, 'come', 55], 'CSE']]
```

```
In [83]: list1.remove(12)
```

```
In [84]: list1
```

```
Out[84]: [15, 39.54, 'Hello', [12, 39, 25, [34, 'come', 55], 'CSE']]
```

```
In [87]: list1[1]
```

```
Out[87]: 39.54
```

```
In [88]: str
```

```
Out[88]: 'hello welcome you all'
```

```
In [92]: str.split(' ',3)
```

```
Out[92]: ['hello', 'welcome', 'you', 'all']
```

```
In [94]: dict={'name':'Nihanth Sai','Address':'Nellore','Mobile No':9014157901}
```

```
In [95]: dict
```

```
Out[95]: {'name': 'Nihanth Sai', 'Address': 'Nellore', 'Mobile No': 9014157901}
```

```
In [98]: dict['name']
```

```
Out[98]: 'Nihanth Sai'
```

```
In [99]: dict['Address']
```

```
Out[99]: 'Nellore'
```

```
In [102]: dict['Mobile No']
```

```
Out[102]: 9014157901
```

```
In [103]: len(dict)
```

```
Out[103]: 3
```

```
In [104]: dict1=dict.copy
```

```
In [105]: dict
```

```
Out[105]: {'name': 'Nihanth Sai', 'Address': 'Nellore', 'Mobile No': 9014157901}
```

```
In [106]: dict1
```

```
Out[106]: <function dict.copy>
```

```
In [107]: dict.values()
```

```
Out[107]: dict_values(['Nihanth Sai', 'Nellore', 9014157901])
```

```
In [108]: dict.keys()
```

```
Out[108]: dict_keys(['name', 'Address', 'Mobile No'])
```

```
In [ ]:
```