

```
In [2]: str="Hello World"
print(str)
```

Hello World

```
In [ ]: Str="Hello World"
up,lc=0,0
for i in Str:
    if(i.isupper()):
        up+=1
    elif(i.islower()):
        lc+=1
print(up," <upper case    lower case> ",lc)
```

```
In [ ]: str="TNT"
str2=str[::-1]
if(str==str2):
    print("Palindrome")
else:
    print("Not Palindrome")
```

```
In [ ]: str="Hello World"
str[0::3]
'HlWl'
str="Hello World"
count=0
for i in str:
    if i.islower():
        count+=1
print(count)
```

```
In [ ]: if(str2==str):
        print("palindrome")
else:
    print(str2,"Not Palindrome ",str)
```

```
In [ ]:
```

```
In [4]: I="Welcome to Python".split()
print(I)
```

['Welcome', 'to', 'Python']

```
In [5]: print([i.lower() for i in "HELLO"])

['h', 'e', 'l', 'l', 'o']
```

```
In [6]: a=[[1,2],[3,4],5],[6,7]]
a[0][1][1]
```

Out[6]: 4

```
In [7]: a,b=[3,1,2],[5,4,6]
a+b
```

Out[7]: [3, 1, 2, 5, 4, 6]

```
In [9]: a=[2,1,3,5,2,4]
a.remove(2)
print(a)
```

```
[1, 3, 5, 2, 4]
```

```
In [10]: theList=[1, 2, [1.1, 2.2]]
len(theList)
```

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

```
In [11]: my_list = ['p', 'r', 'o', 'b', 'l', 'e', 'm']
print('p' in my_list)
print('a' in my_list)
print('c' not in my_list)
```

```
True
False
True
```

```
In [13]: for fruit in ['apple','banana','mango']:
print("I like",fruit)
```

```
I like apple
I like banana
I like mango
```

```
In [15]: pow2 = [2 ** x for x in range(10) if x > 5]
pow2
```

```
Out[15]: [64, 128, 256, 512]
```

```
In [16]: odd = [x for x in range(20) if x % 2 == 1]
odd
```

```
Out[16]: [1, 3, 5, 7, 9, 11, 13, 15, 17, 19]
```

```
In [17]: l=[x+y for x in ['Python ', 'C '] for y in ['Language', 'Programming']]
l
```

```
Out[17]: ['Python Language', 'Python Programming', 'C Language', 'C Programming']
```

```
In [18]: odd = [1, 9]
odd.insert(1,3)
print(odd)
odd[2:2] = [5, 7]
print(odd)
```

```
[1, 3, 9]
[1, 3, 5, 7, 9]
```

```
In [19]: odd = [1, 3, 5]
print(odd + [9, 7, 5])
print(["re" * 3])
```

```
[1, 3, 5, 9, 7, 5]
['re', 're', 're']
```

```
In [20]: pow2=[2**x for x in range(10)if x>5]
pow2
```

```
Out[20]: [64, 128, 256, 512]
```

```
In [14]: pow2 = [2 ** x for x in range(10) if x > 5]
pow2
```

```
Out[14]: [64, 128, 256, 512]
```

```
In [21]: odd=[x for x in range (20) if x%2==1]
odd
```

```
Out[21]: [1, 3, 5, 7, 9, 11, 13, 15, 17, 19]
```

```
In [22]: odd = [2, 4, 6, 8]
odd[0] = 1
print(odd)
```

```
[1, 4, 6, 8]
```

```
In [23]: l=[6,12,18,24,30]
for i in l:
    for j in range(1,i%5):
        print(j,'#',end='')
    print()
```

```
1 #
1 #2 #
1 #2 #3 #
```

```
In [24]: names = ['Hardik', 'Virat', 'Rahul', 'Dhavan']
print(names[-1][-1])
```

```
n
```

```
In [25]: l=[10,20,30,40,50,60]
for i in range(1,6):
    l[i-1]=l[i]
for i in range(0,6):
    print(l[i],end='')
```

```
203040506060
```

```
In [29]: myList = [1, 5, 5, 5, 5, 1]
max = myList[0]
indexOfMax = 0
for i in range(1, len(myList)):
    if myList[i] > max:
        max = myList[i]
        indexOfMax = i
print(indexOfMax)
```

```
1
```

```
In [31]: odd = [2, 4, 6, 8]
odd[0] = 1
print(odd)
```

```
odd[1:4] = [3, 5, 7]
print(odd)
```

```
[1, 4, 6, 8]
[1, 3, 5, 7]
```

```
In [32]: "Welcome to Python4csip.com".split()
```

```
Out[32]: ['Welcome', 'to', 'Python4csip.com']
```

```
In [ ]: 2 What will be the output of following program:
```

```
myList = [1, 5, 5, 5, 5, 1]
max = myList[0]
indexOfMax = 0
for i in range(1, len(myList)):
    if myList[i] > max:
        max = myList[i]
        indexOfMax = i
print(indexOfMax)
```

```
In [40]: l=[6,12,18,24,30]
for i in l:
    for j in range(1,i%5):
        print(j,'#',end='')
    print()
```

```
1 #
1 #2 #
1 #2 #3 #
```

```
In [42]: m = [[x, x + 1, x + 2] for x in range(0, 3)]
m
```

```
Out[42]: [[0, 1, 2], [1, 2, 3], [2, 3, 4]]
```

```
In [33]: list1 = ["python", "list", 1952, 2323, 432]
list2 = ["this", "is", "another", "list"]
print(list1)
print(list1[1:4])
print(list1[1:])
print(list1[0])
print(list1 * 2)
print(list1 + list2)
```

```
['python', 'list', 1952, 2323, 432]
['list', 1952, 2323]
['list', 1952, 2323, 432]
python
['python', 'list', 1952, 2323, 432, 'python', 'list', 1952, 2323, 432]
['python', 'list', 1952, 2323, 432, 'this', 'is', 'another', 'list']
```

```
In [37]: list1 = [5, 10, 15, 20, 25, 50, 20]
list1[list1.index(20)]=200
print(list1)
```

```
[5, 10, 15, 200, 25, 50, 20]
```

```
In [44]: list("a#b#c#d".split('#'))
```

```
-----  
TypeError                                Traceback (most recent call last)  
Cell In[44], line 1  
----> 1 list("a#b#c#d".split('#'))  
  
TypeError: 'list' object is not callable
```

```
In [46]: m=[[x,x+1,x+2]for x in range(0,3)]  
m
```

```
Out[46]: [[0, 1, 2], [1, 2, 3], [2, 3, 4]]
```

```
In [38]: list1 = [5, 10, 15, 20, 25, 50, 20]  
print(sum(list1))  
  
145
```

```
In [49]: #What will be the output of following program:  
myList = [1, 5, 5, 5, 5, 1]  
max = myList[0]  
indexOfMax = 0  
for i in range(1, len(myList)):  
    if myList[i] > max:  
        max = myList[i]  
        indexOfMax = i  
print(indexOfMax)  
  
1
```

```
In [ ]:
```