```
1  s='amar'
2  s2="amar"
3  s3='''amar'''
4  s4="""amar"""
5
```

```
1  print(s,s2,s3,s4)
```

```
amar amar amar amar
```

```
1  # + used to add string to other
2  s="am"
3  s2="ar"
4  s3=s+s2
```

```
1  print(s3)
```

```
amar
```

```
1  s="python"
2  print(s,id(s))
3  s=s+" language"
4  print(s,id(s))
```

```
python 140338200369008
python language 140337163498096
```

```
1  data=[10,20]
2  print(data,id(data))
3  data.append(1000)
4  print(data,id(data))
```

```
[10, 20] 140336944413248
[10, 20, 1000] 140336944413248
```

```
1 s="amar"
2 s2="amar"
3 if s==s2:
4     print('yes')
```

```
yes
```

```
1 #indexed access +ve and -ve
2 for i in range(0,len(s)):
3     print(i,s[i])
```

```
0 a
1 m
2 a
3 r
```

```
1 for i in s:
2     print(i)
```

```
a
m
a
r
```

```
1 s*3
```

```
'amaramaramar'
```

```
1 s="god_"
2 s*11
```

```
'god_god_god_god_god_god_god_god_god_god_god_'
```

```
1 for i in range(1,10,2):
2     print("X"*i)
```

```
X
XXX
XXXXX
XXXXXXX
XXXXXXXXX
```

```
1 XXXXX
2  XXXX
3   XXX
4    XX
5     X
```

```
1 for i in range(5,0,-1):
2     print(" "*(6-i),"X "*i)
```

```
 X X X X X
  X X X X
   X X X
    X X
     X
```

```
1 s="abcdefghijk"
2 print(s[3:6])
3 print(s[:3])# 0 to 3
4 print(s[4:])# 4 to len(s)
5 print(s[::-1])#reverse
6 print(s[::])#start 0 end len(s)
7 print(s[::+2])
8
```

```
def
abc
efghijk
kjihgfedcba
```

```
    abcdefghijk
    acegik
```

```python
1 #take a word and print word triangle
2 #ip:amar
3 #op: a
4       am
5       ama
6       amar
```

```python
1 word=input("Enter a word:")
2 for i in range(1,len(word)+1):
3     print(word[:i])
```

```
    Enter a word:program
    p
    pr
    pro
    prog
    progr
    progra
    program
```

```
1
```

```python
1 word=input("Enter a word:")
2 for i in range(1,len(word)+1):
3     print(" "*(len(word)-i),word[:i])
```

```
    Enter a word:amar
        a
       am
      ama
     amar
```

```python
1 word=input("Enter a word:")
2 if word==word[::-1]:
3     print("yes")
4 else:
5     print("no")
```

```
    Enter a word:nitinwa
    no
```

```python
1 "AMAR" in "amarendra bahubali"
```

```
    False
```

```python
1 s="python"
2 dset=set(s)
3 print(dset)
```

```
    {'p', 'n', 'o', 'y', 't', 'h'}
```

```
1 word=input("Enter a word:")
2 count=0
3 for c in word:
4     if c=='a' or c=='e' or c=='i' or c=='o' or c=='u':
5         count+=1
6 print("in",word,"we have",count,"vowels")
```

```
Enter a word:this is a test line to try.
in this is a test line to try. we have 7 vowels
```

```
1 s="tHis IS tEST fOr Us"
```

```
1 s.swapcase()
```

```
'ThIS is Test FoR uS'
```

```
1 s.lower()
```

```
'this is test for us'
```

```
1 s.upper()
```

```
'THIS IS TEST FOR US'
```

```
1 print(s)
```

```
tHis IS tEST fOr Us
```

```
1 s
```

```
'tHis IS tEST fOr Us'
```

```
1 s.title()
```

```
'This Is Test For Us'
```

```
1 s.capitalize()
```

```
'This is test for us'
```

```
1 s="assassination"
2 s.count('s')
```

```
4
```

```
1 s="assassination"
2 s.rfind('s')
```

```
5
```

```
1 s.center(30,'*')
```

```
    '********assassination********'
```

```
1 s="he came by taxi"
2 s.replace("taxi","ola")
```

```
    'he came by ola'
```

```
1 s="this is done by me"
2 s.replace(" IS"," was")
3 print(s)
```

```
    this is done by me
```

```
1 s="     this     is a    test    line"
2 wordlist=s.split()
3 print(len(wordlist))
```

```
    5
```

```
1 print("Words are:",len((input("Enter line:")).split()))
```

```
    Enter line:                         this                 is                 test
    Words are: 3
```

```
1 word=input('Enter line :')
2 word=word.lower()
3 count=word.count('a')+word.count('e')+word.count('i')+word.count('o')+word.count('u')
4 print("Vowels:",count)
```

```
    Enter line :THIS IS a Test
    Vowels: 4
```

```
1 s="1,12,123,234"
2 wlist=s.split(',')
3 wlist
```

```
    ['1', '12', '123', '234']
```

```
 1 line="this is what was needed to do" #it is this
 2 #create list
 3 wlist=line.split()
 4 print("Word list:",wlist)
 5 #reverse list
 6 wlist=wlist[::-1]
 7 print("Reverse Word list:",wlist)
 8 #add each word of list to rline +
 9 rline=""
10 for word in wlist:
11     rline=rline+" "+word
12     print(rline)
```

```
13 #print
14
```

```
    Word list: ['this', 'is', 'what', 'was', 'needed', 'to', 'do']
    Reverse Word list: ['do', 'to', 'needed', 'was', 'what', 'is', 'this']
     do
     do to
     do to needed
     do to needed was
     do to needed was what
     do to needed was what is
     do to needed was what is this
```

```
1 line=input("Enter names:")
2 nlist=line.split()
3 c=202300
4 nlist.sort()
5 for i in nlist:
6     c+=1
7     print("E_id:",c,"Name:",i)
```

```
    Enter names:xxxx aaaa www fff ggg  bbb jjj tt rrr eeee
    E_id: 202301 Name: aaaa
    E_id: 202302 Name: bbb
    E_id: 202303 Name: eeee
    E_id: 202304 Name: fff
    E_id: 202305 Name: ggg
    E_id: 202306 Name: jjj
    E_id: 202307 Name: rrr
    E_id: 202308 Name: tt
    E_id: 202309 Name: www
    E_id: 202310 Name: xxxx
```

```
1 # count frequency of each word in a line of string
2 line=input("Enter a line:")
3 wlist=line.split()
4 for w in wlist:
5     print(w)
```

```
    Enter a line:this is is this line is
    this
    is
    is
    this
    line
    is
```

```
1 # count frequency of each word in a line of string
2 line=input("Enter a line:")
3 wlist=set(line.split())
4 for w in wlist:
5     print(w)
```

```
    Enter a line:this is is this line is
    this
    is
    line
```

```
1 # count frequency of each word in a line of string
2 line=input("Enter a line:")
3 wlist=line.split()
4 ulist=sorted(set(line.split()))
5 for w in ulist:
6     print(w,":",wlist.count(w))
```

```
Enter a line:this is is this line is
is : 3
line : 1
this : 2
```

```
 1 line="this is so good so is to is is is"
 2 #world list
 3 wlist=line.split()
 4 print("Word List:",wlist)
 5 finallist=[]
 6 #keep 1st occurance and eliminate other
 7 for i in wlist:
 8     if i not in finallist:
 9         finallist.append(i)
10         print(i,"added")
11     else:
12         print(i,"rejected")
13 print(finallist)
14
15
```

```
Word List: ['this', 'is', 'so', 'good', 'so', 'is', 'to', 'is', 'is', 'is']
this added
is added
so added
good added
so rejected
is rejected
to added
is rejected
is rejected
is rejected
['this', 'is', 'so', 'good', 'to']
```

```
 1 word=input("Enter a word")
 2 wlist=[]
 3 #wordlist
 4 for i in word:
 5     wlist.append(i)
 6 for i in range(0,len(word)):
 7     t=wlist.pop(0)
 8     wlist.append(t)
 9     w=""
10     for j in wlist:
11         w+=j
12     print("pass",i,":",w)
13
```

```
Enter a wordindia
pass 0 : ndiai
pass 1 : diain
pass 2 : iaind
pass 3 : aindi
pass 4 : india
```

```
1 #ord():returns ascii
2 #chr():converts ascii to char
```

```
1 ord("a")
```

```
97
```

```
1 chr(97+1)
```

```
'b'
```

```
1 for i in range(97,(97+26)):
2     print(chr(i),":",i)
```

```
a : 97
b : 98
c : 99
d : 100
e : 101
f : 102
g : 103
h : 104
i : 105
j : 106
k : 107
l : 108
m : 109
n : 110
o : 111
p : 112
q : 113
r : 114
s : 115
t : 116
u : 117
v : 118
w : 119
x : 120
y : 121
z : 122
```

```
1 start=input("Enter start:")
2 end=input("Enter end:")
3 for i in range(ord(start),ord(end)+1):
4     print(chr(i),"--->",i)
```

```
Enter start:E
Enter end:J
E ---> 69
```

```
        F ---> 70
        G ---> 71
        H ---> 72
        I ---> 73
        J ---> 74
```

```python
 1 line1 ="aaa ccc eee ggg hhh iii jjj kkk"
 2 line2 ="bbb ddd fff "
 3 wlist1=line1.split()
 4 wlist2=line2.split()
 5 print(wlist1)
 6 print(wlist2)
 7 line3=""
 8 i=0
 9 j=0
10 while i<len(wlist1) or j<len(wlist2):
11     if i<len(wlist1):
12         line3=line3+" "+wlist1[i]
13         i+=1
14     if j<len(wlist2):
15         line3=line3+" "+wlist2[j]
16         j+=1
17
18 print(line3)
19 #line3="hi this how is are how you it is"
20
```

```
    ['aaa', 'ccc', 'eee', 'ggg', 'hhh', 'iii', 'jjj', 'kkk']
    ['bbb', 'ddd', 'fff']
     aaa bbb ccc ddd eee fff ggg hhh iii jjj kkk
```

```python
 1 l1=[1,2,3,4]
 2 l2=['aa','bb','cc','dd']
 3 dll={}
 4 for i in range(len(l1)):
 5     dll[l1[i]]=l2[i]
 6 print(dll)
```

```
    {1: 'aa', 2: 'bb', 3: 'cc', 4: 'dd'}
```

```python
 1 dll2={10:"aaa",33:"er"}
 2 dll2.update(dll)
 3 print(dll2)
```

```
    {10: 'aaa', 33: 'er', 1: 'aa', 2: 'bb', 3: 'cc', 4: 'dd'}
```

```python
 1 todel=[1,33,4]
 2 for i in todel:
 3     print("Deleted:",dll2.pop(i))
 4 print(dll2)
 5
```

```
    Deleted: aa
    Deleted: er
```

```
Deleted: dd
{10: 'aaa', 2: 'bb', 3: 'cc'}
```

```python
 1 d={"m1":77,"m2":67,"m3":97,"m4":87,"m5":7,"m6":47}
 2 keys=d.keys()
 3 print(keys)
 4 max=0
 5 sub=''
 6 for i in keys:
 7     if d[i]>max:
 8         max=d[i]
 9         sub=i
10 print("Best subject:",sub)
11
12
```

```
dict_keys(['m1', 'm2', 'm3', 'm4', 'm5', 'm6'])
Best subject: m3
```

```python
 1 d={"m1":77,"m2":67,"m3":97,"m4":87,"m5":7,"m6":47}
 2 max(d.values())
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
<ipython-input-129-3cf5c8b4f242> in <cell line: 2>()
      1 d={"m1":77,"m2":67,"m3":97,"m4":87,"m5":7,"m6":47}
----> 2 max(d.values())

TypeError: 'int' object is not callable
```

SEARCH STACK OVERFLOW