

1

```
N=int(input("Enter Total number of elements in list : "))
lists=[]
for i in range(N):
    value=int(input("Enter a number :"))
    lists.append(value)
test = [each for each in lists if each>0]
print(test)
"""for i in lists:
    if i>0:
        print(i)"""
```

OUTPUT

```
Enter Total number of elements in list : 4
Enter a number :6
Enter a number :7
Enter a number :3
Enter a number :1
[6, 7, 3, 1]
> |
```

2

```
N = int(input("ENTER THE TOTAL NUMBER OF ELEMENTS:"))
```

```
lists=[]
```

```
for i in range(N):
```

```
    value=int(input("Enter a number :"))
```

```
    lists.append(value)
```

```
    squared_numbers = [number ** 2 for number in lists]
```

```
print(squared_numbers)
```

## OUTPUT

```
Shell
ENTER THE TOTAL NUMBER OF ELEMENTS:3
Enter a number :5
Enter a number :6
Enter a number :8
[25, 36, 64]
> |
```

3

```
a= input("ENTER THE WORD:")
vowels="AaEeliOoUu"
ans=set(each for each in a if each in vowels)
print(ans)
```

## OUTPUT

```
ENTER THE WORD:EDUCATION  
{ 'I', 'U', 'A', 'O', 'E' }
```

4

```
a= input("ENTER A STRING:")
```

```
for element in a:
```

```
    print(ord(element))
```

## OUTPUT

```
ENTER A STRING:hello world
104
101
108
108
111
32
119
111
114
108
100
```

5

```
def word_count(str):
    counts = dict()
    words = str.split()
    for word in words:
        if word in counts:
            counts[word] += 1
        else:
            counts[word] = 1
    return counts

print( word_count('This course introduces a basic step towards program writing
and develops the logical ability and problem-solving skill using Python
Programming Language'))
```

OUTPUT

```
{'program': 1, 'Python': 1, 'course': 1, 'Programming': 1, 'the': 1, 'logical': 1, 'skill': 1, 'problem-solving': 1, 'This': 1, 'Language': 1, 'a': 1, 'basic': 1, 'towards': 1, 'and': 2, 'ability': 1, 'using': 1, 'develops': 1, 'writing': 1, 'step': 1, 'introduces': 1}
```

6

```
lst=[]
```

```
n=int(input('Enter the number of elements: '))
```

```
for i in range(0,n):
```

```
    ele=int(input("Enter the elements: "))
```

```
    lst.append(ele)
```

```
    if(lst[i]>=100):
```

```
        lst[i]="Over"
```

```
        print (lst)
```

```
    elif(lst[i]<100):
```

```
        print (lst)
```

```
    else:
```

```
        print("Invalid value.")
```

OUTPUT

```
Enter the number of elements: 6
Enter the elements: 67
[67]
Enter the elements: 34
[67, 34]
Enter the elements: 21
[67, 34, 21]
Enter the elements: 89
[67, 34, 21, 89]
Enter the elements: 78
[67, 34, 21, 89, 78]
Enter the elements: 2
[67, 34, 21, 89, 78, 2]
```

7

```
N=int(input("Number of names : "))
```

```
listed = []
```

```
count=0
```

```
for i in range(N):
```

```
    name = input("Enter name : ")
```

```
    listed.append(name)
```

```
for i in listed:
```

```
    for j in i:
```

```
        if(j=="a"):
```

```
            count=count+1;
```

```
print(count)
```

## Shell

```
Number of names : 3
Enter name : gayathri
Enter name : parthik
Enter name : rithik
3
> |
```

8

```
list1=[]
list2=[]
list3=[]
n1=int(input("Total elements in first list : "))
for i in range(n1):
    value=int(input("Input no : "))
    list1.append(value)
n2=int(input("Total elements in second list : "))
for i in range(n2):
    value=int(input("Input no : "))
    list2.append(value)
if(n1 == n2):
    print("Same length")
else:
    print("Not same length ")
```



```
if(sum(list1)==sum(list2)):
    print("Same sum ")
else:
    print("Sum are different")
```

```
list3=[each for each in list1 if each in list2]
print("Same members are  :",list3)
```

## OUTPUT


```
Total elements in first list : 4
Input no : 2
Input no : 4
Input no : 6
Input no : 8
Total elements in second list : 4
Input no : 1
Input no : 3
Input no : 6
Input no : 7
Same length
Sum are different
Same members are  : [6]
```

```
Total elements in first list : 5
Input no : 11
Input no : 22
Input no : 33
Input no : 44
Input no : 55
Total elements in second list : 5
Input no : 11
Input no : 22
Input no : 33
Input no : 44
Input no : 55
Same length
Same sum
Same members are : [11, 22, 33, 44, 55]
```

9

```
def change_char(str1):
    char = str1[0]
    str1 = str1.replace(char, '$')
    str1 = char + str1[1:]
    return str1
print(change_char('onion'))
```

OUTPUT

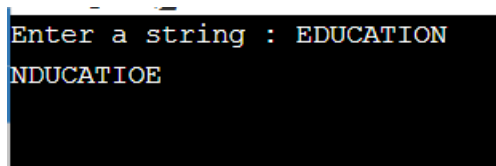
A terminal window with a black background and green text. The text reads: "oni\$`n", "...Program finished with exit code 0", and "Press ENTER to exit console." followed by a white cursor. The window has a blue title bar with standard OS icons.

```
oni$`n
...Program finished with exit code 0
Press ENTER to exit console.
```

10

```
str = input("Enter a string : ")
new_str = str[-1:] + str[1:-1] + str[:1]
print(new_str)
```

OUTPUT

A terminal window with a black background and green text. The text reads: "Enter a string : EDUCATION" and "NDUCATIOE".

```
Enter a string : EDUCATION
NDUCATIOE
```

11

```
r = int(input("Enter the radius : "))
a = 3.14*r*r
print(a)
```

## OUTPUT

```
Enter the radius : 4
50.24
```

12

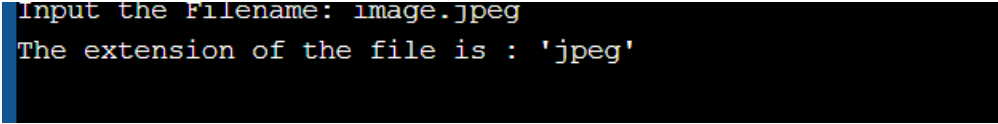
```
a=int(input("Enter the first number: "))
b=int(input("Enter the second number: "))
c=int(input("Enter the third number: "))
if a>b and a>c:
    print(a,"is the largest number")
elif b>c:
    print(b,"is the largest number")
else:
    print(c,"is the largest number")
```

## OUTPUT

```
Enter the first number: 6
Enter the second number: 78
Enter the third number: 12
78 is the largest number
```

13

```
filename = input("Input the Filename: ")
f_extns = filename.split(".")
print ("The extension of the file is : " + repr(f_extns[-1]))
```

A terminal window with a black background and a blue vertical bar on the left. It shows the output of the Python script from the previous block. The first line is "Input the Filename: image.jpeg" and the second line is "The extension of the file is : 'jpeg'".

```
Input the Filename: image.jpeg
The extension of the file is : 'jpeg'
```

14

```
print ("Print leap year between two given years")
print ("Enter start year")
startYear = int(input())
print ("Enter last year")
endYear = int(input())
print ("List of leap years:")
for year in range(startYear, endYear):
    if (year%4 == 0) and (year%100!= 0) or (year%400==0):
```

```
print(year)
```

```
Print leap year between two given years
Enter start year
2000
Enter last year
2021
List of leap years:
2000
2004
2008
2012
2016
2020
```

15

```
n=int(input("Enter an integer: "))
```

```
a=n+n*n+n*n*n
```

```
print(a)
```

```
Enter an integer: 4
84
...Program finished with exit co
```

16

```
color_list_1 =set(["White","Black","Red"])  
color_list_2 =set(["Red","Green"])  
print(color_list_1.difference(color_list_2))
```

Shell

```
{'White', 'Black'}
```

17

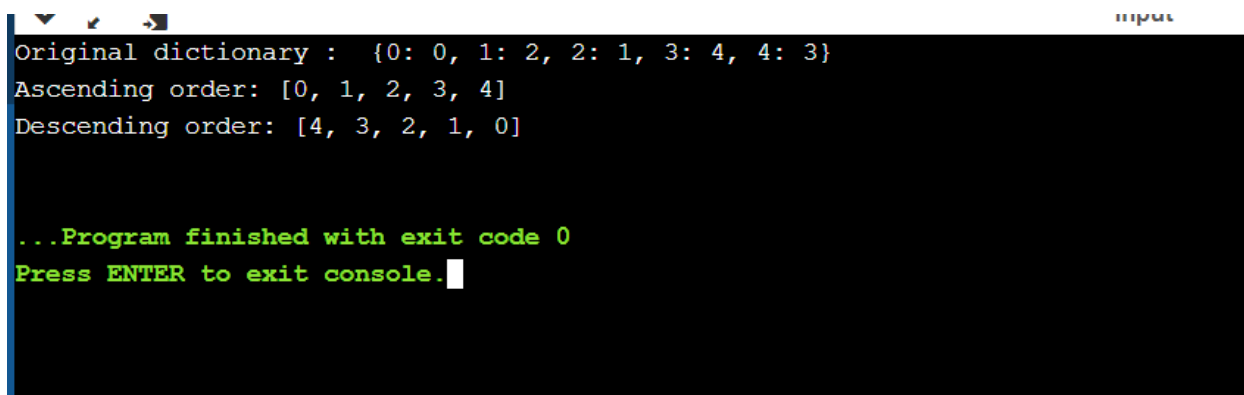
```
defchars_mix_up(a, b):  
    new_a = b[:1] + a[1:]  
    new_b = a[:1] + b[1:]  
    returnnew_a + ' ' + new_b  
print(chars_mix_up('abc', 'xyz'))
```

OUTPUT

```
xbc ayz  
> |
```

18

```
d = {1: 2, 3: 4, 4: 3, 2: 1, 0: 0}  
print('Original dictionary : ',d)  
x = sorted(d)  
print("Ascending order:",x)  
x=sorted(d,reverse=True)  
print("Descending order:",x)
```

A screenshot of a Python console window with a black background and green text. The output shows the original dictionary, its ascending order sorted keys, and its descending order sorted keys. The console also displays a message indicating the program finished with exit code 0 and prompts the user to press ENTER to exit the console.

```
Original dictionary : {0: 0, 1: 2, 2: 1, 3: 4, 4: 3}  
Ascending order: [0, 1, 2, 3, 4]  
Descending order: [4, 3, 2, 1, 0]  
  
...Program finished with exit code 0  
Press ENTER to exit console.
```

19

```
dict1 = { 'Ritika': 5, 'Sam': 7, 'John' : 10 }  
dict2 = {'Aadi': 8, 'Sam': 20, 'Mark' : 11 }
```



```
dict3 = {**dict1 , **dict2}
print('Merged dictionary :')
print(dict3)
```

## OUTPUT

```
Merged dictionary :
{'Ritika': 5, 'Sam': 20, 'John': 10, 'Aadi': 8, 'Mark': 11}
> |
```

20

```
def compute_hcf(x, y):
    if x > y:
        smaller = y
    else:
        smaller = x
    for i in range(1, smaller+1):
        if((x % i == 0) and (y % i == 0)):
            hcf = i
```

```
return hcf
num1 = int(input("Enter the first number: "))
num2 = int(input("Enter the second number: "))
print("The H.C.F. is", compute_hcf(num1, num2))
```

## OUTPUT

```
Enter the first number: 40
Enter the second number: 50
The H.C.F. is 10
> |
```

21

```
list = [11, 22, 33, 44, 55, 56]
print ("Original list:")
print (list)
for i in list:
    if(i%2 == 0):
        list.remove(i)
print ("List after removing EVEN numbers:")
print (list)
```

## OUTPUT

```
Original list:  
[11, 22, 33, 44, 55, 56]  
List after removing EVEN numbers:  
[11, 33, 55]  
> |
```