

1. Write

a Python program that accepts a hyphen-separated sequence of words as input and prints the words in a hyphen-separated sequence after sorting them alphabetically.

Sample

Items: green-red-yellow-black-white

expected

Result: black-green-red-white-yellow

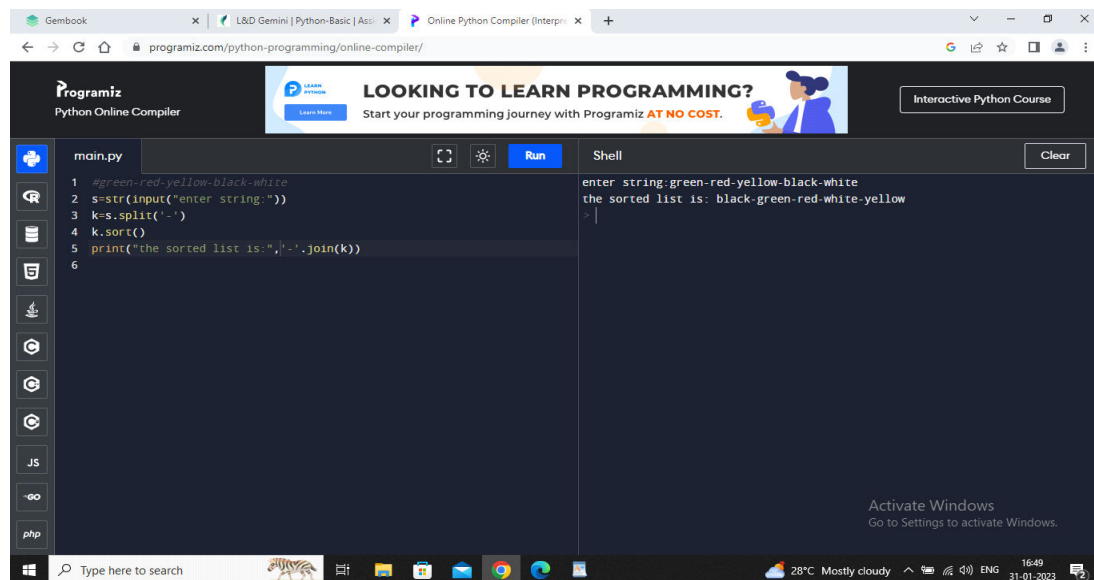
code:

```
s=str(input("enter string:"))
```

```
k=s.split('-')
```

```
k.sort()
```

```
print("the sorted list is:",'-'.join(k))
```



2. Python program to access a function inside a function.

code:

```
def function():
```

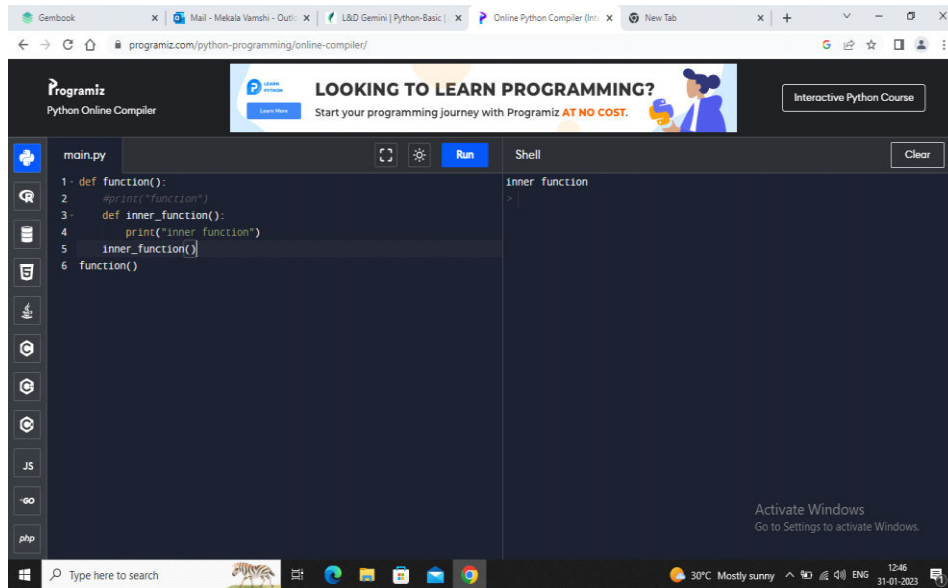
```
    #print("function")
```

```
    def inner_function():
```

```
print("inner function")
```

```
inner_function()
```

```
function()
```



3. Python program to reverse a string

Sample

String: "1234abcd"

Expected

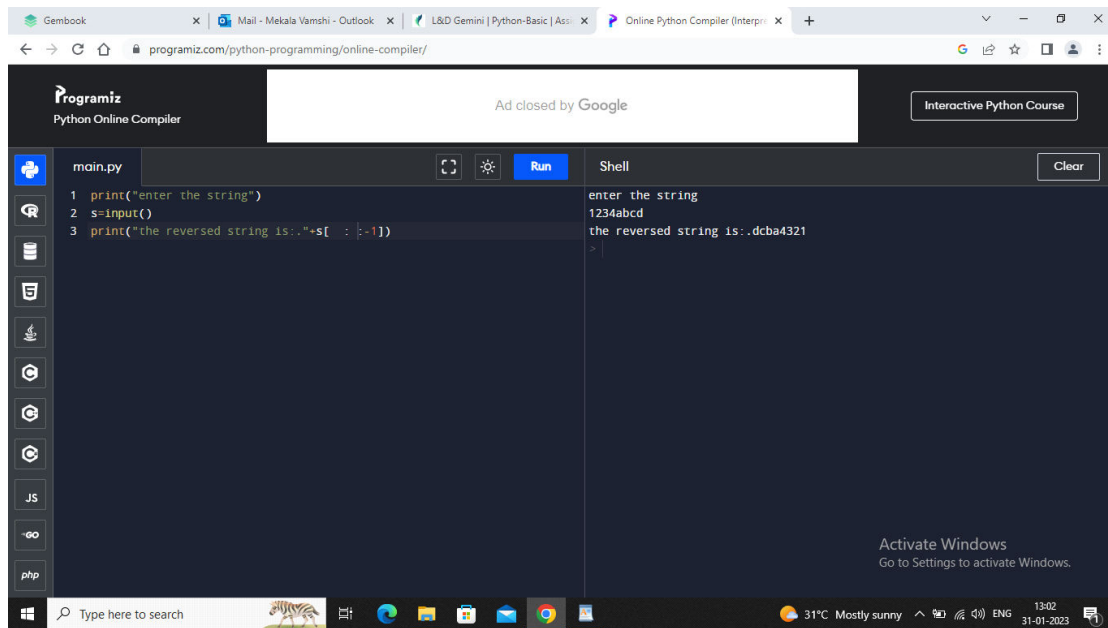
Output: "dcba4321"

code:

```
print("enter the string")
```

```
s=input()
```

```
print("the reversed string is:."+s[::-1])
```



4. Write a Python program to find the first duplicate element in a given array of integers. Return -1 if there are no such elements.

code:

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

```
k=1
```

```
for i in s:
```

```
    if s.count(i)>1:
```

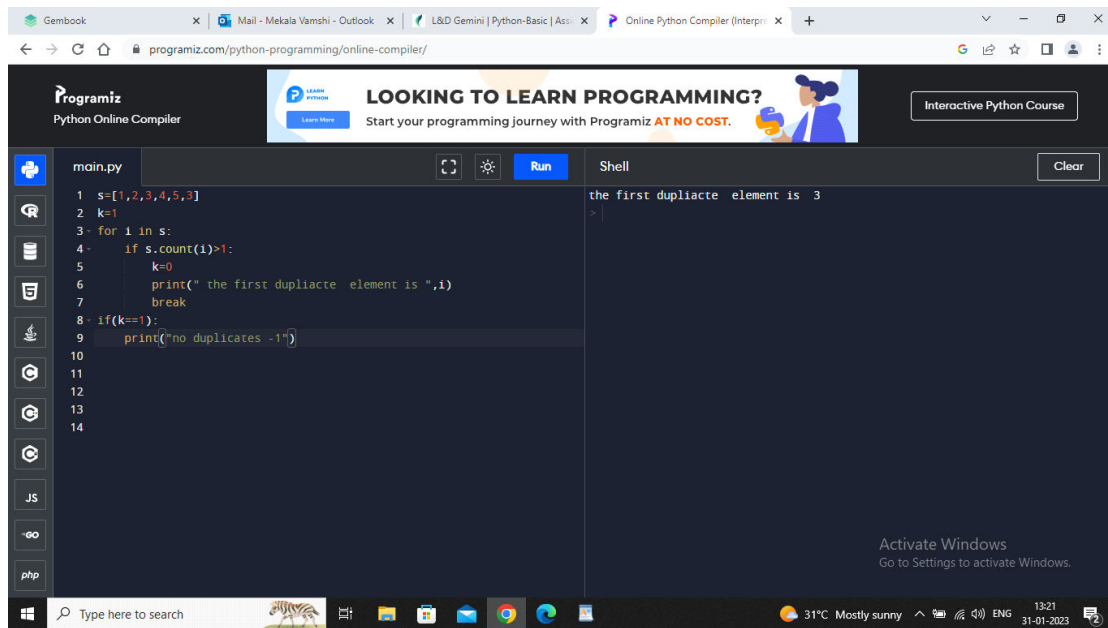
```
        k=0
```

```
        print(" the first duplicate element is ",i)
```

```
        break
```

```
if(k==1):
```

```
    print("no duplicates -1")
```



5. Write

a Python program to get the number of occurrences of a specified element in an array.

```
s=[1,2,3,4,5,3,2,3,4,1,4,5,7,8,4,3]
```

```
k=1
```

```
k=[]
```

```
for i in s:
```

```
    if i not in k:
```

```
        n=s.count(i)
```

```
        k.append(i)#because duplicate occurrence
```

```
        print("The element {} occurs in list is {}times ".format(i,n))
```

```
1 s=[1,2,3,4,5,3,2,3,4,1,4,5,7,8,4,3]
2 k=1
3 k=[]
4 for i in s:
5     if i not in k:
6         n=s.count(i)
7         k.append(i) #because duplicate occurrence
8         print("The element {} occurs in list is {}times ".format(i,n))
9
10
11
12
13
```

The element 1 occurs in list is 2times
The element 2 occurs in list is 2times
The element 3 occurs in list is 4times
The element 4 occurs in list is 4times
The element 5 occurs in list is 2times
The element 7 occurs in list is 1times
The element 8 occurs in list is 1times

6. Write a Python program to get the number of occurrences of a specified element in array.

```
def volume(r):
```

```
    h=4/3*3.14*r*r
```

```
    return h
```

```
print("enter the radius")
```

```
r=input()
```

```
k=volume(float(r))
```

```
print("the volume of sphere",k)
```

The screenshot shows the Programiz Python Online Compiler interface. The code editor on the left contains a Python script named `main.py` that defines a function `volume(r)` to calculate the volume of a sphere. The function uses the formula $V = \frac{4}{3} \pi r^3$. The script prompts the user to enter the radius, reads the input, and prints the calculated volume. The Shell window on the right shows the execution output: "enter the radius", "9", and "the volume of sphere 339.12". The browser's address bar shows the URL `programiz.com/python-programming/online-compiler/`. The Windows taskbar at the bottom indicates the date is 31-01-2023 and the time is 16:55.

```
1- def volume(r):
2-     h=4/3*3.14*r*r
3-     return h
4-
5- print("enter the radius")
6- r=input()
7- k=volume(float(r))
8- print("the volume of sphere",k)
9-
10 |
```

Shell

```
enter the radius
9
the volume of sphere 339.12
>
```

7. Write a function that checks whether a number is in a given range (Inclusive of high and low)

`def check(r,low,high):`

`if(r>low and r<high):`

`return 1`

`else:`

`return 0`

The screenshot shows the Programiz Python Online Compiler interface with a new Python script. The code editor on the left contains a function `check(r,low,high)` that returns 1 if the number `r` is within the range `[low, high]` and 0 otherwise. The script prompts the user to enter a number, reads the input, and checks if it is within the range 10 to 999. The Shell window on the right shows the execution output: "enter the number to whether it is given in range or not", "29", and "the number is in range". The browser's address bar shows the URL `programiz.com/python-programming/online-compiler/`. The Windows taskbar at the bottom indicates the date is 31-01-2023 and the time is 13:51.

```
1- def check(r,low,high):
2-     if(r>low and r<high):
3-         return 1
4-     else:
5-         return 0
6-
7- print("enter the number to whether it is given in range or not")
8- r=int(input())
9- s=check(r,10,999)
10- if(s):
11-     print("the number is in range")
12- else:
13-     print("not in range")
```

Shell

```
enter the number to whether it is given in range or not
29
the number is in range
>
```

```
print("enter the number to whether it is given in range or not")
```

```
r=int(input())
```

```
s=check(r,10,999)
```

```
if(s):
```

```
    print("the number is in range")
```

```
else:
```

```
    print("not in range")
```

8. Write a Python function that accepts a string and calculate the number of upper case letters and lower case letters.

```
print("enter the string")
```

```
s=input()
```

```
u=0
```

```
l=0
```

```
for i in s:
```

```
    if i.islower():
```

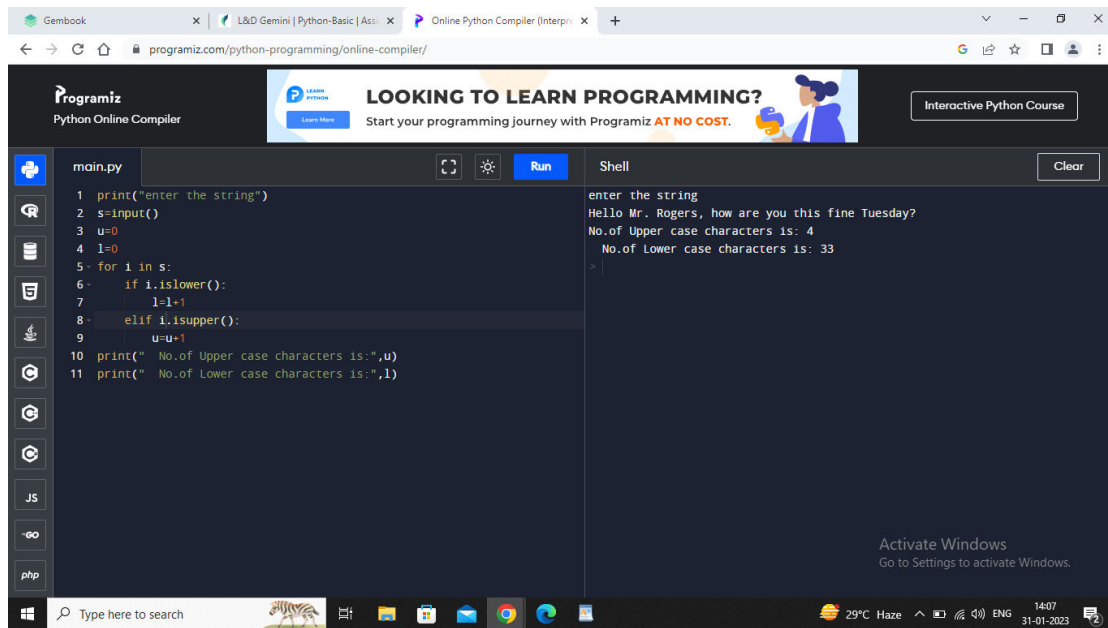
```
        l=l+1
```

```
    elif i.isupper():
```

```
        u=u+1
```

```
print("  No.of Upper case characters is:",u)
```

```
print("  No.of Lower case characters is:",l)
```



9. Write a Python function that takes a list and returns a new list with unique elements of the first list.

SampleList

k=[1,1,1,1,2,2,3,3,3,3,4,5]

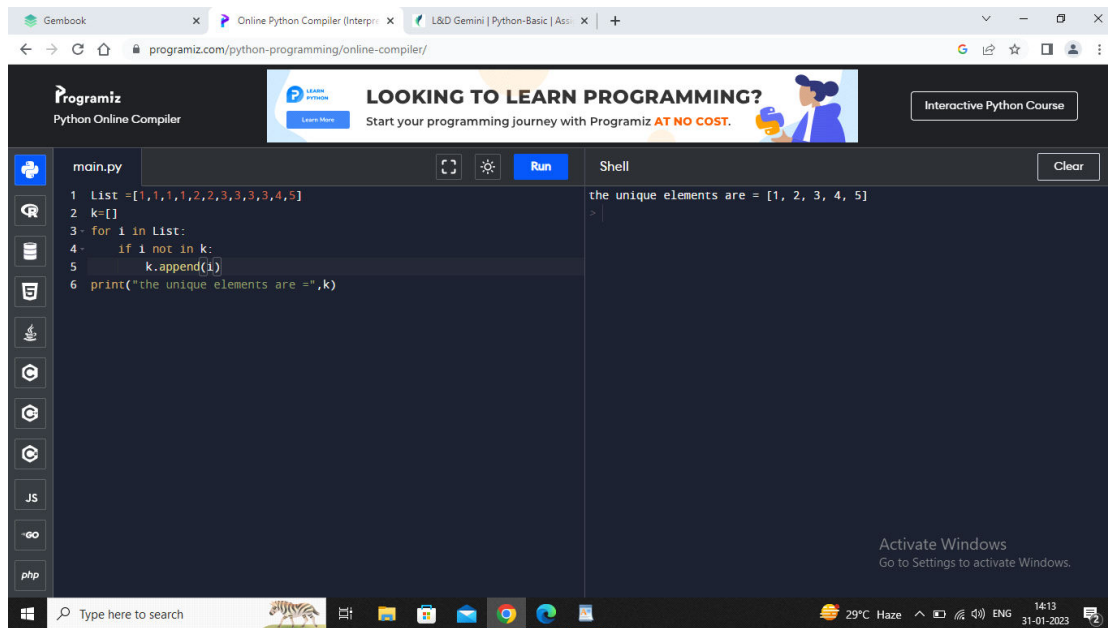
k=[]

for i in List:

if i not in k:

k.append(i)

print("the unique elements are =",k)



10. Write a Python function to multiply all the numbers in a list.

```
List=[1,2,3,-4]
```

```
sum=1
```

```
for i in List:
```

```
    sum=sum*i
```

```
print("The product of all numbers = {}".format(sum))
```

Gembook

Online Python Compiler (Interpr...

L&D Gemini | Python-Basic | Ass...

programiz.com/python-programming/online-compiler/

Programiz

Python Online Compiler

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main.py

Run

```
1 List=[1,2,3,-4]
2 sum=1
3 for i in List:
4     sum=sum*i
5 print("The product of all numbers = {}".format(sum))
```

Shell

Clear

```
The product of all numbers = -24
>
```

JS

GO

PHP

Activate Windows

Go to Settings to activate Windows.

Type here to search

29°C Haze

ENG

14:16

31-01-2023