

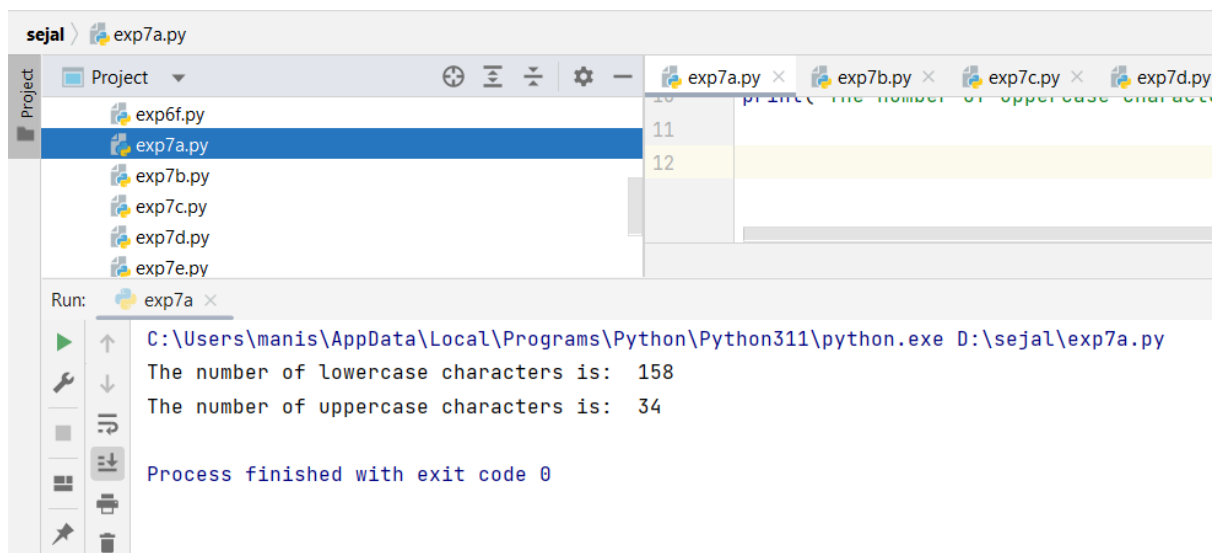
Experiment No.7

Aim: Edit/compile/run a program to read a string and display the total number of uppercase and lowercase letters.

Program A:

```
str="Torna Fort, also known as Prachandagad, is a large fort
located in Pune district, in the Indian state of Maharashtra.
It is historically significant because it was the First Fort
captured by CHHATRAPATI SHIVAJI MAHARAJ in 1646, at the age of
16."
lower = 0
upper = 0
for i in str:
    if (i.islower()):
        lower+=1
    elif(i.isupper()):
        upper+=1
print("The number of lowercase characters is: ",lower)
print("The number of uppercase characters is: ",upper)
```

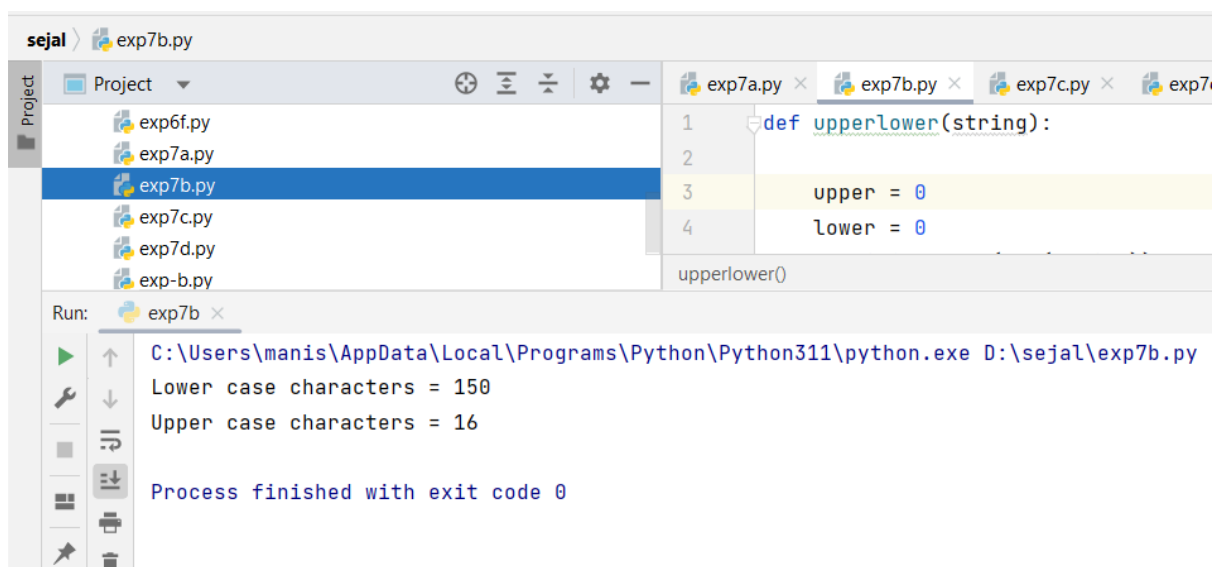
Output:



Program B:

```
def upperlower(string):  
  
    upper = 0  
    lower = 0  
    for i in range(len(string)):  
        if(ord(string[i]) >=97 and  
           ord(string[i]) <=122):  
            lower+=1  
  
        elif(ord(string[i]) >=65 and  
            ord(string[i]) <=90):  
            upper+=1  
    print('Lower case characters = %s' %lower, "\n"  
          'Upper case characters = %s' %upper)  
  
string = """Pearls of gleams in these Autumn Nights  
Adorn our lives else trite  
With Sparklers that motley skies  
As Soaring Spirits of powder wander  
Let us Thank the Heavenly might,  
In this Festive Season of Lights."""  
upperlower(string)
```

Output:



The screenshot shows a Python IDE with a project named 'sejal'. The file explorer on the left lists several files: exp6f.py, exp7a.py, exp7b.py (selected), exp7c.py, exp7d.py, and exp-b.py. The main editor window displays the code for exp7b.py, showing the definition of the upperlower function and its call. The Run console at the bottom shows the output of the program: 'Lower case characters = 150' and 'Upper case characters = 16', followed by 'Process finished with exit code 0'.

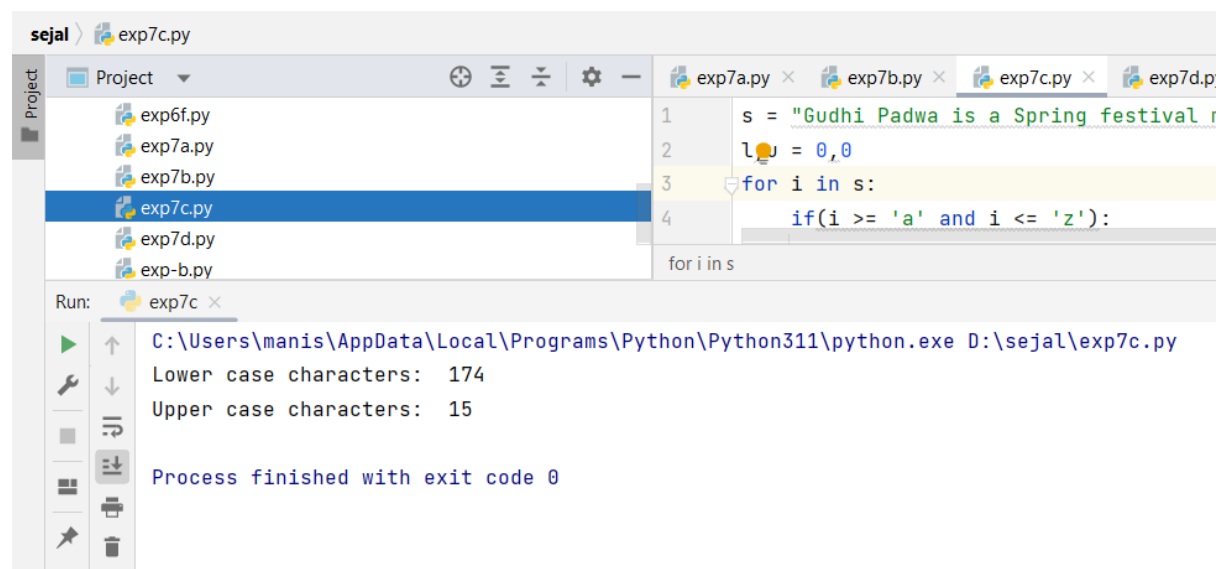
```
sejal > exp7b.py  
Project  
exp6f.py  
exp7a.py  
exp7b.py  
exp7c.py  
exp7d.py  
exp-b.py  
Run: exp7b  
C:\Users\manis\AppData\Local\Programs\Python\Python311\python.exe D:\sejal\exp7b.py  
Lower case characters = 150  
Upper case characters = 16  
Process finished with exit code 0
```

Program C:

s = "Gudhi Padwa is a Spring festival marking the start of the Traditional New Year primarily for Marathi and Konkani Hindus. It is celebrated in and around India at the start of Chaitra, the first month of the Lunisolar Hindu Calendar."

```
l,u = 0,0
for i in s:
    if(i >= 'a' and i <= 'z'):
        l=l+1
    if(i>'A' and i<='Z'):
        u=u+1
print('Lower case characters: ',l)
print('Upper case characters: ',u)
```

Output:

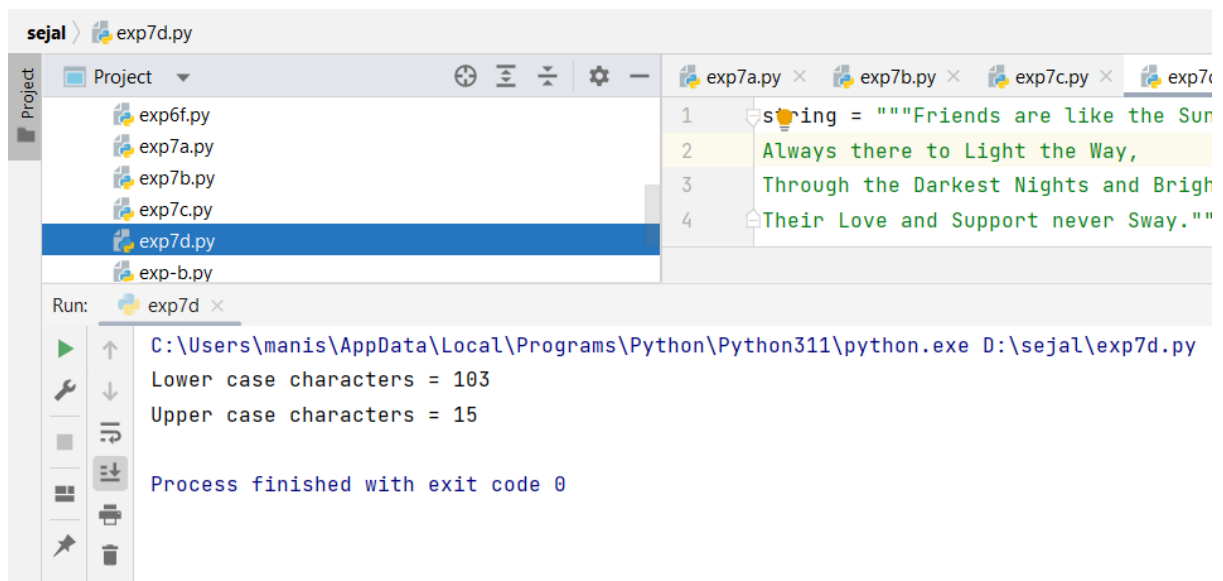


Program D:

string = """Friends are like the Sun and Moon,
Always there to Light the Way,
Through the Darkest Nights and Brightest Days,
Their Love and Support never Sway."""

```
upper = 0
lower = 0
up = "ABCDEFGHIJKLMNOPQRSTUVWXYZ"
lo = "abcdefghijklmnopqrstuvwxyz"
for i in string:
    if i in up:
        upper+=1
    elif i in lo:
        lower+=1
print('Lower case characters = %s' %lower)
print('Upper case characters = %s' %upper)
```

Output:



Program E:

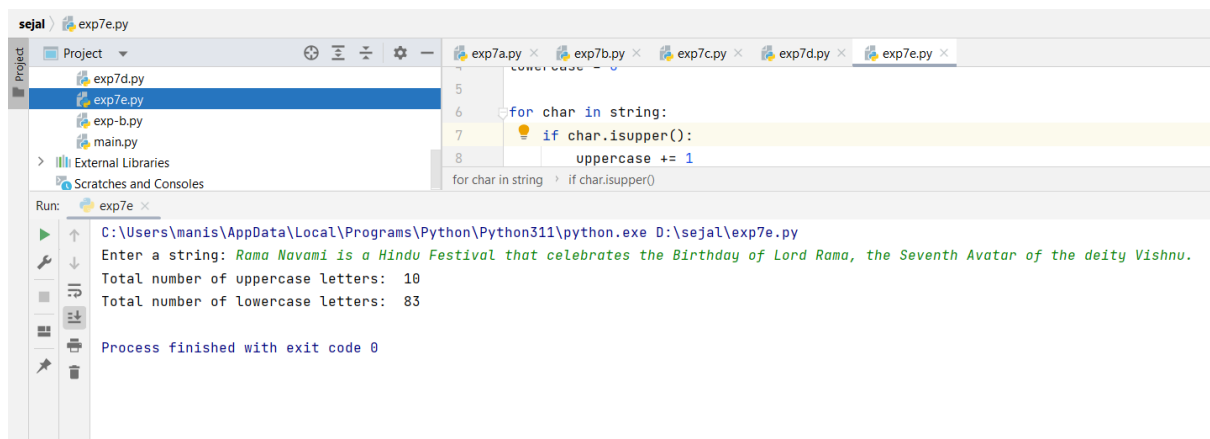
```
string = input("Enter a string: ")

uppercase = 0
lowercase = 0

for char in string:
    if char.isupper():
        uppercase += 1
    elif char.islower():
        lowercase += 1

print("Total number of uppercase letters: ", uppercase)
print("Total number of lowercase letters: ", lowercase)
```

Output:



The screenshot shows a Python IDE with a project named 'sejal'. The file explorer on the left lists 'exp7d.py', 'exp7e.py', 'exp-b.py', and 'main.py'. The editor displays a Python script 'exp7e.py' with the following code:

```
4 lower_case = 0
5
6 for char in string:
7     if char.isupper():
8         uppercase += 1
9
10 for char in string:
11     if char.islower():
12         lower_case += 1
```

The 'Run' console shows the execution of 'exp7e.py' using 'python.exe'. The output is as follows:

```
C:\Users\manis\AppData\Local\Programs\Python\Python311\python.exe D:\sejal\exp7e.py
Enter a string: Rama Navami is a Hindu Festival that celebrates the Birthday of Lord Rama, the Seventh Avatar of the deity Vishnu.
Total number of uppercase letters: 10
Total number of lowercase letters: 83
Process finished with exit code 0
```

Practical Performance (4)	Writeup & Oral (4)	Attendance (2)	Total (10)