

Python Programming Examples on Sets, FileHandling:

- ✓ Python Program to Count the Number of Vowels Present in a String using Sets:

```
s=raw_input("Enter string :")
count = 0
vowels = set("aeiou")
for letter in s:
    if letter in vowels:
        count += 1
print("Count of the vowels is:")
print(count)
```

- ✓ Python Program to Check Common Letters in Two Input Strings:

```
s1=raw_input ("Enter first string:")
s2=raw_input("Enter second string:")
a=list(set(s1)&set(s2))
print("The common letters are:")
for i in a:
    print(i)
```

- ✓ Python Program that Displays which Letters are in the First String but not in the Second:

```
s1=raw_input("Enter first string:")
s2=raw_input("Enter second string:")
a=list(set(s1)-set(s2))
print("The letters are:")
for i in a:
    print(i)
```

✓ Python Program that Displays which Letters are Present in Both the Strings:

```
s1=raw_input("Enter first string:")
s2=raw_input("Enter second string:")
a=list(set(s1)|set(s2))
print("The letters are:")
for i in a:
    print(i)
```

✓ Python Program that Displays which Letters are in the Two Strings but not in Both:

```
s1=raw_input("Enter first string:")
s2=raw_input ("Enter second string:")
a=list(set(s1)^set(s2))
print("The letters are:")
for i in a:
    print(i)
```

File Handling:

✓ Python Program to Read the Contents of a File:

```
a=str(input("Enter the name of the file with .txt extension:"))
file2=open(a, 'r')
line=file2.readline()
while(line!=""):
    print(line)
    line=file2.readline()
file2.close()
```

✓ Python Program to Count the Number of Words in a Text File:

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

num_words = 0

with open(fname, 'r') as f:
    for line in f:
        words = line.split()
        num_words += len(words)
print("Number of words:")
print(num_words)
```

✓ Python Program to Read a String from the User and Append it into a File:

```
fname = input("Enter file name: ")
file3=open(fname,"a")
c=input("Enter string to append: \n");
file3.write("\n")
file3.write(c)
file3.close()
print("Contents of appended file:");
file4=open(fname,'r')
line1=file4.readline()
while(line1!=""):
    print(line1)
    line1=file4.readline()
file4.close()
```

✓ Python Program to Copy the Contents of One File into Another:

```
with open("test.txt") as f:
    with open("out.txt", "w") as f1:
        for line in f:
            f1.write(line)
```

✓ Python Program that Reads a Text File and Counts the Number of Times a Certain Letter Appears in the Text File:

```
fname = input("Enter file name: ")  
l=input("Enter letter to be searched:")  
k = 0
```

```
with open(fname, 'r') as f:  
    for line in f:  
        words = line.split()  
        for i in words:  
            for letter in i:  
                if(letter==l):  
                    k=k+1  
print("Occurrences of the letter:")  
print(k)
```

✓ Python Program to Append the Contents of One File to Another File:

```
name1 = input("Enter file to be read from: ")  
  
name2 = input("Enter file to be appended to: ")  
  
fin = open(name1, "r")  
  
data2 = fin.read()  
  
fin.close()
```

```
fout = open(name2, "a")
```

```
fout.write(data2)
```

```
fout.close()
```

✓ Python Program to Count the Number of Blank Spaces in a Text File:

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

```
k = 0
```

```
with open(fname, 'r') as f:
```

```
    for line in f:
```

```
        words = line.split()
```

```
        for i in words:
```

```
            for letter in i:
```

```
                if(letter.isspace):
```

```
                    k=k+1
```

```
print("Occurrences of blank spaces:")
```

```
print(k)
```

✓ Python Program to Read the Contents of a File in Reverse Order:

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

```
for line in reversed(list(open(filename))):
```

```
    print(line.rstrip())
```