Module 6:

Count the number occurrences of a given word (Unigram) in a file.

We hope that you have learnt about counting a word which starts from a given character. Now we are going to learn about how to search a substring in a given file.

We count the number of given words in different ways, we can use count() function, which is used to count of the given word in a file or string this is in built in python another way by using for loop.

Method 1

Syntax: count(sub[, start[, end]])

Counts the number of occurrences of a substring. Optionally takes a starting and ending index between which to search. Here is an example to understand

```
String = "I am Raj. I am in iiit"
sub = "am"
count = String.count(sub)
print count
```

OUT PUT : 2

Method 2

We can count the number of given word occurs in a file in another way.

```
String = "I am is Raju. I am IIIT,HYD "
a = String.split()
sub = "am"
count = 0
for i in a:
   if i==sub:
      count = count+1
print count
```

Output: 2

Worked Example 1:

Open a text file in reading mode and count number of a given word in that file. Using count function.

```
file = open('text.txt','r')# opening a file in reading
mode
```

```
read = file.read()    untitled folder    # reading a file
and assign to a variable
sub  = raw_input("Enter a word to count\n")# taking
a word
count = read.count(sub)       # counting the word in
data
print "Total Number of ",sub, " are ",count # printing
the count
```

(Note : create a txt file in the same folder where the python file is saved.)

Worked Example 2:
Open a text file in reading mode and count number of a given word in that file.
Without using count function.

```
file = open('text.txt','r')# opening a file in readig mode
read = file.read()         # reading a file and assgin to a
varible
split = read.split()      # spliting data into a list
sub  = raw_input("Enter a word to count\n")# taking a
word
count = 0
for i in split:           # using for loop to comparing each
word with sub
   if i == sub:
      count = count+1
print "Total Number of ",sub," are ",count # printing
the count
```

(Note : create a txt file in the same folder where the python file is saved.)

PRACTICE PROBLEMS:

1 . What is the output when you run the following program?

```
a = "Ramu is Ramu and Raju is Ramu"
print a.count("ramous")
```
A . 2   B . 1   C. 0   D. Error

2. Where is the Error in the following program?

```
a = "Ramu is Ramu and Ramu is Raju"
print a.Count(Ramu)
```
A. Line1   B. Line2   C. Both(A&B)   D. No Error

3. Read a file name "family.txt" which has several family member's file names. Count the number of word "is" in each file, as well as the total number of times occurs in all the files.

1. Fathername.txt
2. Mothername.txt
3. Son.txt…….etc

4. Read a file name "List.txt" from the user and a word and count occurrences of that word in the file.

ALL THE BEST

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