Module-4

Reading Material:

       In the previous modules we have seen how to open, read, close a file and learned about strings, variables and how to count the number of words from the given file. Now we are going to see string functions how to count the words which starts with a character from the given file. To find the words with same char we have to use string functions. To do those kind problems you should know some basic string operations.

Accessing Values in Strings:

Python does not support a character type; these are treated as strings of length one, thus also considered a substring.

To access substrings, use the square brackets for slicing along with the index or indices to obtain your substring:

       The best way to remember how slices work is to think of the indices as pointing *between* characters, with the left edge of the first character numbered 0. Then the right edge of the last character of a string of *n* characters has index *n*, for example:

```
 +---+---+---+---+---+
 | H | e | l | p | A |
 +---+---+---+---+---+
 0   1   2   3   4   5
-5  -4  -3  -2  -1
```

Worked out example:

>>>s="HelpA"

>>> print s[0]   #To print the first character
H
>>>print s[2] #To print the Middle character you can also write s[len(s)/2]
l
>>> print s[5] #To print the last character
A

We can also use some predefined string functions. See the below table

Common string operations:

String Method	Description	Example
string.starts *charac* with(*ter)*	Return True if the string starts with the specified *character*, otherwise	>>> s="India" >>> print s.startswith("i")

		return False	True

string.fi
nd(
	substri
	ng)
		Returns the lowest index in the string where the character is found within the slice range of start and end. Returns -1 if sub is not found	>>> s="india"
			>>> s.find("d")
			2

Worked out problems:

1) Using **startswith()**
   >>> x="string"
   print x.startswith('s') #
   True

2) Count the number of words which starts with character in the given string
   s= "Personal firewall software may warn about the connection IDLE"
   char=raw_input("Enter a charcter:")
   words=s.split()
   count=0
   for i in range (len(words)):
    if words[i].startswith(char):
         count=count+1
   print "number of words which starts with given character(",char,")",count
   Output: Enter a charcter: s
              number of words which starts with given character(s) 1

<u>Problem set:</u>
1). Print the middle character for given odd length string?
2). Print all the first characters in the string "India is my country"?   Hint: use split() function
3). Write a program to print the even characters in the given string" Country"?