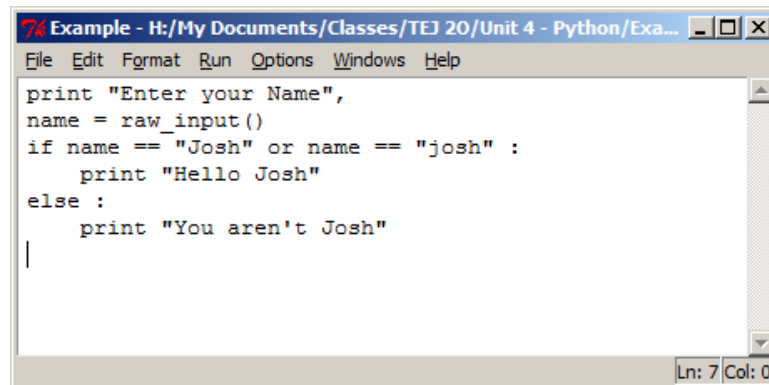


Python – Working with Text

As we learned before, text, in Python, is case sensitive. Look at the following program :



```
Example - H:/My Documents/Classes/TEJ 20/Unit 4 - Python/Exa...
File Edit Format Run Options Windows Help
print "Enter your Name",
name = raw_input()
if name == "Josh" or name == "josh" :
    print "Hello Josh"
else :
    print "You aren't Josh"
|
Ln: 7 Col: 0
```

The above, checks the input to see if the user entered all lower case or capitalized the name. To avoid this, we can use some of the following functions. A **function** is a built-in set of instructions that perform a certain task.

.upper() → converts the string to all upper case

Ex : word = "hello"
 Print word.upper()

Output → **HELLO**

.lower() → converts the string to all lower case

Ex : name = "Jones"
 Print name.lower()

Output → **jones**

.capitalize() → converts the first letter of the string to upper case and the rest to lower case

Ex : sentence = "hello MY name is Bob!"
 Print sentence.capitalize()

Output → **Hello my name is bob!**

.title() → converts the first letter of every new word to upper case and the remaining letters to lower case

Ex : sentence = "hello MY name is Bob!"
 Print sentence.title()

Output → **Hello My Name Is Bob!**

. count()

→ counts the number of times a substring occurs

Ex : word = "Hello"
 Print word.count("l")

Output → **2** {counts how many "l"s there are }

Ex : Sentence = "John told his dad that he had a bad headache "
 Print Sentence.count("ad")

Output → **4** {counts how many times "ad" occurs together }
 John told his dad that he had a bad headache

+

→ adds string together

Ex : word1 = "Hello"
 word2 = "There"
 Print word1 + word2

Output → **HelloThere**

→ lets you repeat a string a specified integer number of times

Ex : word = "Hello"
 Print word * 3

Output → **HelloHelloHello**

\n

→ forces a new line

Ex : word1 = "Hello \n"
 word2 = "There"
 Print word1, word2

Output → **Hello**
 There

\t

→ forces a tab

Ex : word1 = "Hello \t"
 word2 = "There"
 Print word1, word2

Output → **Hello There**

len()

→ returns the length of the string

Ex: word = "hello"
 Print len(word)

Output → **5**

[]

→ used to print a certain character in a string (text)

Ex: word = "Hello"
 Print word[2]

Output → **l** {prints the 2nd character in the string, but starts counting at 0... word[0] = "H", word[1]="e", ...-}

[:]

→ used to print a certain character in a string (text)

Ex: word = "Hello"
 Print word[:2]

Output → **He** {prints the first 2 characters in the string, but starts counting at 1}

Assignment #6

1. Write a program that asks the user to enter a 7 character word. The computer is to check if the length of the string is 7 characters. If it isn't then a message will be displayed "The word is not 7 characters". If it is, then the program will print the word backwards on the screen.

```
Enter a 7 Character word : Popcorn  
nrocpoP
```

2. Write a program that asks the user to enter a 7 character word. The computer is to check if the length of the string is 7 characters. If it isn't then a message will be displayed "The word is not 7 characters". If it is, then the program will print the word backwards on the screen.

```
Enter a 7 Character word : Popcorn  
  
P  
o  
p  
c  
o  
r  
n
```

3. Write a program that has the user input a sentence and the program returns how many words are in the sentence. ** hint : there are spaces between each word**
4. Write a program that has the user input a sentence and the program returns how many vowels are in the sentence. a, e, i, o, u
Make sure it looks at capitals also. (or convert the sentence to all lower case first)