Practical 1(iii): Strings and Text Processing

Exercise

1. Ask user some questions that require **inputs** of various types, e.g. “What is your name?”, “How old are you?”, “How tall are you?”, “What is your CGPA”, etc. Then find out the variables’ types.
2. Define a string **`s = 'color'`**. Write a Python statement that changes this to "colo**ur**l**ess**" using only the slice and concatenation operations.
3. Read the first 1000 characters from **`'pg2554.txt'`** text file. Then allow the user to find a keyword or key phrase from the text. Display appropriate message to inform the search status. Example is shown below:

```
Enter Keyword or Keyphrase: "sample"
sample not found

Enter Keyword or Keyphrase: "project"
project found at index  5
project appears 3 time(s)

Enter Keyword or Keyphrase: "crime and punishment"
crime and punishment found at index  32
crime and punishment appears 4 time(s)

Enter Keyword or Keyphrase: "quit"
program terminated
```

4. Define a string **`s = 'Hello World'`**. Write a Python statement to **replace** the word “Hello” with “Python”. Print (the updated string **`s`** so that you will see “Python World” instead.
5. Consider a strong password has the following conditions.

```
8 characters length or more
Consists of alphanumeric
Consists of at least one uppercased letter
```

   Write a function called **`password_check()`** that accepts the input **“password”** from a user as the function parameter. The function should return **True** if all conditions above are fulfilled; otherwise return **False**.

   Then ask the user to create a password. Display “Good password” if `password_check()` is true; otherwise display “Bad password”.

Reference:

Steven Bird, Ewan Klein and Edward Loper (2014) Natural Language Processing with Python. *Natural Language Toolkit.* Available at http://www.nltk.org/book/ch03.html