Practical 07

Aim: Write a python function that accepts a string and calculate the number of upper case letters and lower case letters.

Theory:

In Python, isalnum() and islower() are string methods that are used to check if a string meets certain criteria.

The isalnum() method checks if all the characters in a string are alphanumeric. In other words, it checks if the string contains only letters (both uppercase and lowercase) and digits (0-9). If the string contains any other character, such as whitespace or punctuation marks, isalnum() will return False.

Here's an example:

```
string1 = "hello123"
string2 = "hello world"

print(string1.isalnum()) # Output: True
print(string2.isalnum()) # Output: False
```

The <code>islower()</code> method, on the other hand, checks if all the alphabetic characters in a string are lowercase. If the string contains any uppercase characters, digits, whitespace, or punctuation marks, <code>islower()</code> will return <code>False</code>.

Here's an example:

```
string1 = "hello"
string2 = "Hello"
string3 = "hello123"

print(string1.islower()) # Output: True
print(string2.islower()) # Output: False
print(string3.islower()) # Output: True
```

In summary, isalnum() checks if a string contains only alphanumeric characters, while islower() checks if a string contains only lowercase alphabetic characters.