1. Write a Python program to check that a string contains only a certain set of characters (in this case a-z, A-Z and 0-9).

Test:

"ABCDEFabcdef123450"

"\*&%@#!}{"

1. Write a Python program that matches a string that has an a followed by zero or more b's.

Test:

“ab”

“abc”

“a”

“ab”

“abb”

1. Write a Python program that matches a string that has an a followed by one or more b's.

Test:

“ab”

“abc”

“a”

“ab”

“abb”

1. Write a Python program to find sequences of lowercase letters joined by an underscore.

Test:

"aab\_cbbbc"

"aab\_Abbbc"

"Aaab\_abbbc"

1. Write a Python program that matches a word at the beginning of a string.

Test:

"The quick brown fox jumps over the lazy dog."

" The quick brown fox jumps over the lazy dog."

1. Write a Python program that matches a word containing 'z'.

Test:

"The quick brown fox jumps over the lazy dog."

"Python Exercises."

1. Write a Python program to remove leading zeros from an IP address.

Test: "216.08.094.196"

1. Write a Python program to search for literal strings within a string.  
   Sample text : 'The quick brown fox jumps over the lazy dog.'  
   Searched words : 'fox', 'dog', 'horse'
2. Write a Python program to search for a literal string in a string and also find the location within the original string where the pattern occurs.

Sample text : 'The quick brown fox jumps over the lazy dog.'  
Searched words : 'fox'

1. Write a Python program to replace whitespaces with an underscore and vice versa.

Test: “Regular Expressions” and “Code\_Examples”

1. Write a Python program to extract year, month and date from an URL.

Test:

<https://www.washingtonpost.com/news/football-insider/wp/2016/09/02/odell-beckhams-fame-rests-on-one-stupid-little-ball-josh-norman-tells-author/>

1. Write a Python program to find all words starting with 'a' or 'e' in a given string.

Test:

"The following example creates an ArrayList with a capacity of 50 elements. Four elements are then added to the ArrayList and the ArrayList is trimmed accordingly."

1. Write a Python program to replace all occurrences of a space, comma, or dot with a colon.

Test: 'Python Exercises, PHP exercises.'

1. Write a Python program to find all words starting with 'a' or 'e' in a given string.

Test:

"The following example creates an ArrayList with a capacity of 50 elements. Four elements are then added to the ArrayList and the ArrayList is trimmed accordingly."

1. Write a Python program to remove multiple spaces from a string.

Test:

'Python Exercises'