

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

Ans: `^[a-zA-Z0-9]+$` (^ start with [a-zA-Z0-9] these and + for 1 or multiple occurrence and \$ is used for end of the string)

Question 2- Write a RegEx pattern that matches a string that has an a followed by zero or more b's

Ans: `^ab*$` (string will start with a and followed by b, \* will be used for zero or more occurrence)

Question 3- Write a RegEx pattern that matches a string that has an a followed by one or more b's

Ans: `^ab+$` (+ for 1 or more occurrence)

Question 4- Write a RegEx pattern that matches a string that has an a followed by zero or one 'b'.

Ans: `^ab?$` (? For 0 and 1 occurrence)

Question 5- Write a RegEx pattern in python program that matches a string that has an a followed by three 'b'.

Ans: `^ab{3}$` {} – used for exact occurrence

Question 6- Write a RegEx pattern in python program that matches a string that has an a followed by two to three 'b'.

Ans: `^ab{2,3}$`

Question 7- Write a Python program that matches a string that has an 'a' followed by anything, ending in 'b'.

Ans: `^a.*b$` (. to match anything, \* used for 0 or more occurrence)

Question 8- Write a RegEx pattern in python program that matches a word at the beginning of a string.

Ans: `^\w+` (+ will match one or more word characters)

Question 9- Write a RegEx pattern in python program that matches a word at the end of a string.

Ans: `'\w+$'`

Question 10- Write a RegEx pattern in python program to find all words that are 4 digits long in a string.

Sample text- '01 0132 231875 1458 301 2725.'

Expected output- ['0132', '1458', '2725']

Ans: `'\b\d{4}\b'` ( `\b` is word boundary)