

Regex (short for Regular Expressions) is a way to describe patterns in text. It's used for searching, matching, or replacing text in strings. Some basic elements of Regex are literals and metacharacters. Literals search for the exact part so if your pattern is 'cat' only the string cat would match.

Here is a table of common metacharacters and what they mean.

Symbol	Meaning	Example	Matches
.	Any character	c.t	"cat", "cut", "c9t"
^	Start of string	^Hello	"Hello world"
\$	End of string	world\$	"Hello world"
*	0 or more times	lo*	"l", "lo", "loo"
+	1 or more times	lo+	"lo", "loo", not "l"
?	0 or 1 time (optional)	colou?r	"color", "colour"
[]	One of these chars	[aeiou]	Any vowel
()	Grouping	(ha)+	"ha", "haha", "hahaha"

Finally some common shortcuts

Shortcut	Matches
\d	Any digit (0–9)
\w	Any word character (a-z, A-Z, 0-9, _)
\s	Any whitespace (space, tab, etc.)
\D	Not a digit
\W	Not a word character
\S	Not a whitespace

You will be presented with 4 python code fragments that use regex expressions.

For each task, you will be asked with reading and understanding the code to answer the question presented.

Do not edit any code.

You are free to look at any files contained within the task folder.

The py file contains the main code, the answer.txt file will contain the question and is where you will type your answer, and there may be additional files that relate to the main py file.

Take as much time as needed to answer and announce done when you have finished answering.