

# Regular expression



A regular expression is a sequence of characters that define a search pattern. Usually such patterns are used by string-searching algorithms for "find" or "find and replace" operations on strings, or for input validation. It is a technique developed in theoretical computer science and formal language theory. [Wikipedia](#)

#  
@  
α  
Z

Phone No  Password Validation → 8, special symbols ✓  
Capitals ✓  
small ✓  
Email Valid @— . com

text = "@P P<sup>2</sup>" ✓  
 negX = "[@P<sup>2</sup>] [^P@]"  
 output = ["@P", "P<sup>2</sup>"]

text = "mX.com"  
 negX = "[.com]"  
 output = re.findall(negX, text)  
 What is length of output?

[ ] → Character class  
 [.com]  
 => { ., 'c', 'o', 'm' }  
 => 4 char in set  
 [m, ., c, o, m]

This is how re.findall works ✓

5 ✓

'[a-d]' ←  $\text{eug } X$

Set of char in this char class?

{'a', 'b', 'c', 'd'} ✓

output = ['a', 'd']

= 2 ✓

text = "12#@appledog"

output = re.findall(eug X, text)

len(output) = ?

