

01 Regex In Python

December 19, 2025

0.1 Matching a pattern: re.match()

```
[1]: import re
```

```
[2]: text = """hello world!!! python is a beautifull laguage!  
      I have started learning python in 2005.  
      here is my lucky number is 5.  
      here is my mobile number: 0987654321  
      here is my email: email@email.com and info@uditya.com and  
      udemy@kgptalkie.com  
  
      """
```

```
[3]: pattern = 'hello'  
  
      result = re.match(pattern=pattern, string=text)  
      result
```

```
[3]: <re.Match object; span=(0, 5), match='hello'>
```

```
[4]: result.group()
```

```
[4]: 'hello'
```

0.2 Matching a pattern: re.search()

```
[5]: pattern = r'python'  
  
      result = re.search(pattern=pattern, string=text)  
      result
```

```
[5]: <re.Match object; span=(15, 21), match='python'>
```

```
[6]: pattern = r'\d'  
  
      result = re.search(pattern=pattern, string=text)  
      result
```

```
[6]: <re.Match object; span=(90, 91), match='2'>
```

```
[7]: pattern = r'\d+'

result = re.search(pattern=pattern, string=text)
result
```

```
[7]: <re.Match object; span=(90, 94), match='2005'>
```

0.3 finding the emails in the texts

```
[8]: pat = r'\w+\@\w+\.\w+' # it means that " your have continuous words then @ and
    ↪again continuous words then . and again continuous words" this is the
    ↪simplest email finding pattern

result = re.search(pattern = pat, string = text)
result
```

```
[8]: <re.Match object; span=(208, 223), match='email@email.com'>
```

```
[9]: pat = r'\w+\@\w+\.\w+' # it means that " your have continuous words then @ and
    ↪again continuous words then . and again continuous words" this is the
    ↪simplest email finding pattern

result = re.findall(pattern = pat, string = text)
result
```

```
[9]: ['email@email.com', 'info@uditya.com', 'udemy@kgptalkie.com']
```

```
[10]: pat = r'\d+'

result = re.findall(pattern = pat, string = text)
result
```

```
[10]: ['2005', '5', '0987654321']
```

```
[11]: pat = r'my'

result = re.findall(pattern = pat, string = text)
result
```

```
[11]: ['my', 'my', 'my', 'my']
```

```
[12]: # YYYY-MM-DD

pat = r'\d{4}-\d{2}-\d{2}' # it is say's that it have 4 digit match for the
    ↪year, 2 digit match for the months, and 2 digit match for the day.
```

```
result = re.findall(pattern = pat, string = 'today is 2002-45-09 and in the_
↳next few years it is having 3453-54-89 ')
result
```

```
[12]: ['2002-45-09', '3453-54-89']
```

```
[13]: print(text)
```

```
hello world!!! python is a beautifull laguage!
    I have started learning python in 2005.
    here is my lucky number is 5.
    here is my mobile number: 0987654321
    here is my email: email@email.com and info@uditya.com and
    udemy@kgptalkie.com
```

```
[14]: # YYYY-MM-DD
```

```
pat = r'\d{4}-\d{2}-\d{2}'
```

```
result = re.split(pattern = pat, string = 'today is 2002-45-09 and in the next_
↳few years it is having 3453-54-89 ')
result
```

```
[14]: ['today is ', ' ' and in the next few years it is having ', ' ']
```

```
[15]: len(result) # it is give you a 3 words because it is splits the whole string_
↳data in the three parts
```

```
[15]: 3
```

```
[16]: # YYYY-MM-DD
```

```
pat = r'\d+'
```

```
result = re.split(pattern = pat, string = text)
print(result)
```

```
['hello world!!! python is a beautifull laguage!\n          I have started
learning python in ', '.\n          here is my lucky number is ', '.\n
here is my mobile number: ', '\n          here is my email: email@email.com and
info@uditya.com and \n          udemy@kgptalkie.com\n\n          ']
```

```
[17]: len(result)
```

```
[17]: 4
```

0.4 Replacing the matches

```
[18]: pattern = r'0?\d{10}' # here it means that the regex start with 0 or not(? means) followed by the 10 continuous digits

result = re.findall(pattern = pattern, string= text)
result
```

```
[18]: ['0987654321']
```

0.5 Hiding the mobile number or any sensitive data

```
[19]: result = re.sub(pattern,"*", text )
print(result)
```

```
hello world!!! python is a beautifull laguage!
    I have started learning python in 2005.
    here is my lucky number is 5.
    here is my mobile number: *
    here is my email: email@email.com and info@uditya.com and
    udemy@kgptalkie.com
```

```
[20]: def replace_with_stars(match):
        return '*'*len(match.group())

pattern = r'0?\d{10}'
result = re.sub(pattern,replace_with_stars, text )
print(result)
```

```
hello world!!! python is a beautifull laguage!
    I have started learning python in 2005.
    here is my lucky number is 5.
    here is my mobile number: *****
    here is my email: email@email.com and info@uditya.com and
    udemy@kgptalkie.com
```

```
[21]: pat_email = r'0?\d{10}|\w+@\w+.\w+' # the(/) is tells the mobile number as well as email also
email = re.sub(pat_email, replace_with_stars, text)
print(email)
```

```
hello world!!! python is a beautifull laguage!
    I have started learning python in 2005.
    here is my lucky number is 5.
    here is my mobile number: *****
```

here is my email: ***** and ***** and
