

# 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\u202a  
↳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\u202a  
↳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\u202a  
↳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 ', '.\nhere is my mobile number: ', '\n          here is my email: email@email.com and  
info@uditya.com and \n          udemy@kgptalkie.com\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  
\*\*\*\*\*