

# Python regex `sub` function for search and replace

Python regex substitute function.

## WE'LL COVER THE FOLLOWING ^

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## Python search and replace #

The `sub()` function replaces every occurrence of a pattern with a string or the result of a function.

## Syntax #

```
re.sub(pattern, repl, string, maximum=0)
```

This method replaces all occurrences of the `re pattern` in `string` with `repl`, substituting all occurrences unless a `maximum` value is provided. Finally, returns the modified string.

## Example 1 #

Format the phone number **+61-927 479-548**, remove everything except the digits:

```
#!/usr/bin/python
import re

phone = "Please call the phone # +61-927 479-548"

# Remove anything other than digits
num = re.sub(r'\D', "", phone)
print "The raw phone numbe is : ", num
```





## Example 2: #

Let's use the `sub()` function to “munge” a text, i.e., **randomize** the order of all the characters in each word of a sentence except for the first and last characters:

```
#!/usr/bin/python
import re
import random

def repl(m):
    inner_word = list(m.group(2))
    random.shuffle(inner_word)
    return m.group(1) + "".join(inner_word) + m.group(3)

line = "Learn Scientific Python with Regex";
m = re.sub(r"(\w)(\w+)(\w)", repl, line);

if m:
    print "munged : ", m;
else:
    print "No match!!";
```

