

In [1]:

```
1 # Exercise 01
2 import re
3 string = "Python is fun"
4 match = re.search('^Python', string)
5 if match:
6     print("Pattern found inside the string")
7 else:
8     print("Pattern not found")
```

executed in 24ms, finished 19:17:47 2020-07-20

Pattern found inside the string

In [2]:

```
1 # Exercise 02
2 import re
3 str = " The rain in Spain"
4 x = re.findall("Sp", str)
5 print(x)
```

executed in 200ms, finished 19:17:47 2020-07-20

['Sp']

In [3]:

```
1 # Exercise 03
2 import re
3 string = 'hello, my phone numbers are 0312344 and 1245669'
4 pattern = '\d+'
5 result = re.findall(pattern, string)
6 print(result)
```

executed in 128ms, finished 19:17:47 2020-07-20

['0312344', '1245669']

In [4]:

```
1 # Exercise 04
2 import re
3 string = 'Sixty Nine:69, Eighty nine:89'
4 pattern = ','
5 result = re.split(pattern, string)
6 print(result)
```

executed in 104ms, finished 19:17:48 2020-07-20

['Sixty Nine:69', ' Eighty nine:89']

In [5]:

```
1 # Exercise 05
2 import re
3 string = 'abc 12\ de 23 \n f45 6'
4 pattern = '\d+'
5 replace = 'xyz'
6 new_string = re.sub(pattern, replace, string)
7 print(new_string)
```

executed in 144ms, finished 19:17:48 2020-07-20

```
abc xyz\ de xyz
fxyz xyz
```

In [6]:



```
1 # Task 01
2 # Creating and writing file
3 contacts = ['030212356', '031312455', '032262346', '034242543', '035262346',
4             '030112373', '031312452', '032267367', '034246869', '035262278']
5 with open('contacts.txt', 'w+') as file:
6     for x in contacts:
7         file.write(x + ', ')
```

executed in 112ms, finished 19:17:48 2020-07-20

```

In [7]: 1 import re
2 # Definig Function
3 def networkDetails(filename):
4     # Reading File
5     with open(filename) as file:
6         data = file.read()
7
8     # Searching Patterns
9     jazz = re.findall("030[0-9]\w+", data)
10    zong = re.findall("031[0-5]\w+", data)
11    warid = re.findall("032[0-5]\w+", data)
12    ufone = re.findall("033[0-7]\w+", data)
13    telenor = re.findall("034[0-7]\w+", data)
14    scom = re.findall("0355\w+", data)
15    instaphone = re.findall("0364\w+", data)
16
17    networks = ('Mobilink', 'Zong', 'Warid', 'Ufone', 'Telenor', 'SCOM')
18    contacts = [jazz, zong, warid, ufone, telenor, scom, instaphone]
19    total = 0
20
21    # Looping through contacts
22    for num, name in zip(contacts, networks):
23        count = 0
24        for n in num:
25            count += 1
26            total += 1
27            print('{} {} {}'.format(n, name, count))
28
29    print('-' * 22)
30    for num, name in zip(contacts, networks):
31        print('{} Users: {}'.format(name, len(num)))
32    print('-' * 22, '\nTotal Users: ', total)
33
34 # Calling Function
35 networkDetails('contacts.txt')

```

executed in 120ms, finished 19:17:48 2020-07-20

```

030212356 Mobilink 1
030112373 Mobilink 2
031312455 Zong 1
031312452 Zong 2
032262346 Warid 1
032267367 Warid 2
034242543 Telenor 1
034246869 Telenor 2

```

```

-----
Mobilink Users: 2
Zong Users: 2
Warid Users: 2
Ufone Users: 0
Telenor Users: 2
SCOM Users: 0
Instaphone Users: 0

```

```

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Total Users: 8

```

