

EXTRAS

PYTHON

PYTHON MAP

```
myList = range(10)

def addTwo(n):
    return n+2

newList = map(addTwo,myList)

newList2 = map(lambda x: x+3,myList)
```

PYTHON FILTER

```
myList = range(10)

def checkIfOdd(n):
    return n%2

newList = filter(checkIfOdd,myList)
```

Load regexp module

```
import re
```

Compile RE-expression

```
p = re.compile("hi")
```

Pattern matching:

```
p.match()
```

Matches RE the beginning of string

```
p.search()
```

Scan the entire input for RE

```
p.findall()
```

Get substrings that matches RE. (list)

```
p.finditer()
```

Get substrings that matches RE. (iterator)

Pattern matching example 1:

```
import re

p = re.compile('TH')

if p.match('This is my input'):
    print "match"
else:
    print "no match"
```

Pattern matching example 2:

```
import re

p = re.compile('TH',re.IGNORECASE)

if p.match('This is my input'):
    print "match"
else:
    print "no match"
```

Pattern substitutions:

`p.split()`

Split on RE pattern (list)

`p.sub()`

Find RE and replace with new string

`p.subn()`

Same as sub but also returns numbers of subs

Pattern substitution example 1:

```
import re

p = re.compile('(is|no)',re.IGNORECASE)

print p.sub('IS NOT','This is my input')

>>> THIS NOT IS NOT my input
```


There is a good "Regular Expression HOWTO" on www.python.org

Documentation » Python HOWTOs » Regular Expression HOWTO