

1 List comprehensions: one line loop

List comprehensions are a very Pythonic way of condensing loops and action into a single line.

Here is the long form of a loop:

```
my_list=[1,4,5,7,9,10,3,2,16]

my_new_list=[]

for x in my_list:

    if x>5:

        my_new_list.append(x**2)

print (my_new_list)
```

OUT:

```
[49, 81, 100, 256]
```

This may be done by a single line list comprehension:

```
y = [x**2 for x in my_list if x>5]

print (y)
```

OUT:

```
[49, 81, 100, 256]
```