

Map Function in Python

```
In [2]: def even_or_odd(num):  
        if num%2==0:  
            return "The number {} is Even".format(num)  
        else:  
            return "The number {} is odd".format(num)
```

```
In [3]: even_or_odd(24)
```

```
Out[3]: 'The number 24 is Even'
```

```
In [4]: lst={1,2,3,4,5,6,7,8,9,24,56,78}
```

```
In [5]: map(even_or_odd,lst)
```

```
Out[5]: <map at 0x2a7bc225b50>
```

```
In [8]: list(map(even_or_odd,lst))
```

```
Out[8]: ['The number 1 is odd',  
        'The number 2 is Even',  
        'The number 3 is odd',  
        'The number 4 is Even',  
        'The number 5 is odd',  
        'The number 6 is Even',  
        'The number 7 is odd',  
        'The number 8 is Even',  
        'The number 9 is odd',  
        'The number 78 is Even',  
        'The number 24 is Even',  
        'The number 56 is Even']
```

Lambda Function

anonymous function A function with no name

```
In [9]: def addition(a,b):  
        return a+b
```

```
In [10]: addition(4,5)
```

```
Out[10]: 9
```

```
In [13]: addition=lambda a,b:a+b
```

```
In [14]: addition(12,14)
```

```
Out[14]: 26
```

```
In [15]: def even(num):  
         if num%2==0:  
             return True
```

```
In [16]: even(24)
```

```
Out[16]: True
```

```
In [18]: even1=lambda a:a%2==0
```

```
In [19]: even1(12)
```

```
Out[19]: True
```

```
In [20]: def addition(x,y,z):  
         return x+y+z
```

```
In [21]: addition(2,3,4)
```

```
Out[21]: 9
```

```
In [26]: addition=lambda x,y,z:x+y+z
```

```
In [27]: addition(2,3,4)
```

```
Out[27]: 9
```

```
In [ ]:
```

Filter Funtion in Python

```
In [30]: def even(num):  
         if num%2==0:  
             return True
```

```
In [31]: lst={1,2,3,4,5,6,7,8,9,0}
```

```
In [33]: list(filter(even,lst))
```

```
Out[33]: [0, 2, 4, 6, 8]
```

```
In [34]: list(filter(lambda num:num%2==0,lst))
```

```
Out[34]: [0, 2, 4, 6, 8]
```

```
In [35]: list(map(lambda num:num%2==0,lst))
```

```
Out[35]: [True, False, True, False, True, False, True, False, True, False]
```

```
In [ ]:
```