

```
In [13]: 1 names = ['ramesh', 'suresh', 'smith', 'john', 'nasar']
          2 names_up = list(map(str.upper, names))
          3 print(names_up)

['RAMESH', 'SURESH', 'SMITH', 'JOHN', 'NASAR']
```

```
In [ ]: 1
```

```
In [ ]: 1
```

## Decorator ¶

```
In [17]: 1 def welcome(msg):
          2     print(msg)
```

```
In [19]: 1 welcome("Hiiii how are u")

Hiiii how are u
```

```
In [20]: 1 greeting = welcome
          2 greeting("hello hiiii")

hello hiiii
```

```
In [ ]: 1
```

```
In [21]: 1 # calling function within function
          2
          3 def inc5(x):
          4     return (x+5)
          5
          6 def dec5(x):
          7     return (x-5)
          8
          9 def process(func, x):
         10     res = func(x)
         11     return res
```

```
In [22]: 1 process(inc5, 100)
```

```
Out[22]: 105
```

```
In [23]: 1 process(dec5, 37)
```

```
Out[23]: 32
```

```
In [ ]: 1
```

i am normal function

In [ ]:

1

In [42]:

```
1 def divide(x,y):
2     return x/y
```

In [43]:

```
1 divide(10,5)
```

Out[43]: 2.0

In [44]:

```
1 divide(10,0)
```

```
-----
ZeroDivisionError                                Traceback (most recent call 1
<ipython-input-44-101aa8dc6e2a> in <module>
----> 1 divide(10,0)

<ipython-input-42-cde09cc5b8ef> in divide(x, y)
      1 def divide(x,y):
----> 2     return x/y

ZeroDivisionError: division by zero
```

In [47]:

```
1 def divide_smartly(func):
2     def condition(a,b):
3         print("i am performing division")
4         if b == 0:
5             print("you are trying to devide by zero !!!!")
6             return
7         return func(a,b)
8     return condition
```

In [48]:

```
1 @divide_smartly
2 def divide(a,b):
3     return a/b
```

In [49]:

```
1 divide(10,5)
```

i am performing division

Out[49]: 2.0

In [50]:

```
1 divide(10,0)
```

i am performing division  
you are trying to devide by zero !!!!

In [ ]:

1

In [ ]:

1