

## map fuction

```
In [23]: # map() fuction defined

def cube(n):
    return n**3

x=map(cube,[1,2,3,4,5,6,7,8,9,10])
print(x)
print(type(x))
for i in x:
    print(i,end=" ")

print(list(x))    # It can be convert into List
```

```
<map object at 0x000002080426F910>
<class 'map'>
1 8 27 64 125 216 343 512 729 1000 []
```

```
In [33]: def Even_odd(n):
    if n%2==0:
        return "Even"
    else:
        return "odd"
y=map(Even_odd,[1,2,3,4,5,6,7,8])
print(list(y))
```

```
['odd', 'Even', 'odd', 'Even', 'odd', 'Even', 'odd', 'Even']
```

```
In [ ]: def Even_odd(n):
    if n%2==0:
        return "Even"
    else:
        return "odd"
y=map(Even_odd,[1,2,3,4,5,6,7,8])
print(list(y))
```

## Filter function

```
In [41]: def Even_odd(n):  
         if n%2==0:  
             return True  
         else:  
             return False  
  
y=filter(Even_odd,[1,2,3,4,5,6,7,8])# filter object always Give only True values  
print(list(y))  
  
y=map(Even_odd,[1,2,3,4,5,6,7,8]) # filter object always Give only True values  
print(list(y))
```

[2, 4, 6, 8]

[False, True, False, True, False, True, False, True]

## reduce fuction

```
In [50]: from functools import reduce  
  
def add(a,b):  
    return a+b  
  
y=reduce(add,[1,2,3,4,5])  
print(y)
```

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