

Untitled2

February 16, 2023

```
[1]: l=[1,2,3,4,5]
```

```
[2]: def test(l):  
    kk=[]  
    for i in l:  
        kk.append(i**2)  
    return kk
```

```
[3]: test(l)
```

```
[3]: [1, 4, 9, 16, 25]
```

```
[4]: def sq(x):  
    return x**2
```

```
[5]: list(map(sq,l))
```

```
[5]: [1, 4, 9, 16, 25]
```

```
[6]: list(map(lambda x:x**2,l))
```

```
[6]: [1, 4, 9, 16, 25]
```

```
[7]: list(map(lambda x:x+10,l))
```

```
[7]: [11, 12, 13, 14, 15]
```

```
[9]: l1=[1,2,3,4,5]  
    l2=[6,7,8,9,0]
```

```
[10]: list(map(lambda x,y:x+y ,l1,l2))
```

```
[10]: [7, 9, 11, 13, 5]
```

```
[11]: f=lambda x,y:x+y
```

```
[12]: f
```

```
[12]: <function __main__.<lambda>(x, y)>
```

```
[13]: s="pwwsklls"
```

```
[14]: s.upper()
```

```
[14]: 'PWSKILLS'
```

```
[15]: list(s)
```

```
[15]: ['p', 'w', 's', 'k', 'i', 'l', 'l', 's']
```

```
[17]: list(map(lambda x: x.upper(),s))
```

```
[17]: ['P', 'W', 'S', 'K', 'I', 'L', 'L', 'S']
```

```
[19]: from functools import reduce
```

```
[20]: l=[1,2,3,4,5,6,7,8,9]
```

```
[21]: reduce(lambda x,y:x+y ,l)
```

```
[21]: 45
```

```
[22]: sum(l)
```

```
[22]: 45
```

```
[23]: def add(x,y):  
      return x+y
```

```
[24]: reduce(add,l)
```

```
[24]: 45
```

```
[25]: reduce(lambda x,y:x+y,[])
```

```
-----  
TypeError                                Traceback (most recent call last)  
Cell In[25], line 1  
----> 1 reduce(lambda x,y:x+y,[])  
  
TypeError: reduce() of empty iterable with no initial value
```

```
[26]: reduce(lambda x,y:x+y,[1])
```

```
[26]: 1
```

```
[28]: reduce(lambda x,y:x*y,[1])
```

```
[28]: 1
```

```
[29]: 1
```

```
[29]: [1, 2, 3, 4, 5, 6, 7, 8, 9]
```

```
[31]: reduce(lambda x,y: x if x>y else y,1)
```

```
[31]: 9
```

0.1 filter

```
[32]: 1
```

```
[32]: [1, 2, 3, 4, 5, 6, 7, 8, 9]
```

```
[35]: list(filter(lambda x: x%2==0,1))
```

```
[35]: [2, 4, 6, 8]
```

```
[36]: l1=[-1,-2,-3,1,2,3,4]
```

```
[37]: list(filter(lambda x: x<0,l1))
```

```
[37]: [-1, -2, -3]
```

```
[38]: list(filter(lambda x: x>0,l1))
```

```
[38]: [1, 2, 3, 4]
```

```
[39]: l2=["kk","pw","krish","kishor"]
```

```
[41]: list(filter(lambda x: len(x)<6,l2))
```

```
[41]: ['kk', 'pw', 'krish']
```

```
[ ]:
```