

SURIYA

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1) find square root of a list?

```
In [8]: import math
def mymap(n):
    return math.sqrt(n)
numbers= [1,2,4,6]
print("Original List: ",numbers)
result = map(mymap, numbers)
print("Square the elements list using map():")
print(list(result))
```

Original List: [1, 2, 4, 6]
Square the elements list using map():
[1.0, 1.4142135623730951, 2.0, 2.449489742783178]

2)Filter upper case from a list?

```
In [58]: list1=['x','Y','2','Z','b']
def myfilter(n):
    if n>='A' and n<='Z':
        return n
res=filter(myfilter,list1)
print(list(res))
```

['Y', 'Z']

3)Lambda with reduce in a list?

```
In [62]: from functools import reduce
list1 = ['a','b','c','d']
res = reduce(lambda a, b: a + b,list1)
print(res)
```

abcd

4)Program using lambda and mapping function?

```
In [6]: orders = [ ("34587", "Learning Python, Mark Lutz", 4, 40.95),
                  ("98762", "Programming Python, Mark Lutz", 5, 56.80),
                  ("77226", "Head First Python, Paul Barry", 3,32.95),
                  ("88112", "Einführung in Python3, Bernd Klein",      3, 24.99)]

min_order = 100

invoice_totals = list(map(lambda x: x if x[1] >= min_order else (x[0], x[1] + 10
print(list(invoice_totals))
```

[('34587', 163.8), ('98762', 284.0), ('77226', 108.85000000000001), ('88112', 84.97)]

In []: