

```
1. multi = lambda x, y : x * y

print(multi(5, 20))

print('\nResult from a multi Function')

def multi_func(x, y):
    return x * y

print(multi_func(5, 20))
```

O/P:

100

Result from a multi Function

100

2. from functools import reduce

```
fib_series = lambda n: reduce(lambda x, _: x+[x[-1]+x[-2]],
                             range(n-2), [0, 1])
```

```
print('Fibonacci series upto 2:')
print(fib_series(2))
print('\nFibonacci series upto 5:')
print(fib_series(5))
print('\nFibonacci series upto 6:')
print(fib_series(6))
print('\nFibonacci series upto 9:')
print(fib_series(9))
```

O/P:

Fibonacci series upto 2:

[0, 1]

Fibonacci series upto 5:

[0, 1, 1, 2, 3]

Fibonacci series upto 6:

```
[0, 1, 1, 2, 3, 5]
```

Fibonacci series upto 9:

```
[0, 1, 1, 2, 3, 5, 8, 13, 21]
```

```
3. nums = [2, 4, 6, 9, 11]
```

```
n = 2
```

```
print('Original list: ', nums)
```

```
print('Given number: ', n)
```

```
filtered_numbers=list(map(lambda number:number*n,nums))
```

```
print('Result:')
```

```
print(' '.join(map(str,filtered_numbers)))
```

O/P:

Original list: [2, 4, 6, 9, 11]

Given number: 2

Result:

4 8 12 18 22

4. # Take a list of numbers

```
my_list = [12, 65, 54, 39, 102, 339, 221,]
```

```
# use anonymous function to filter
```

```
result = list(filter(lambda x: (x % 9 == 0), my_list))
```

```
# display the result
```

```
print('Numbers divisible by 9 are',result)
```

O/P:

Numbers divisible by 9 are [54]

5. list1 = [21,3,4,6,33,2,3,1,3,76]

```
#even numbers
```

```
even_count = len(list(filter(lambda x: (x%2 == 0) , list1)))
```

```
print('Even numbers available in the list: ', even_count)
```

O/p:

```
Even numbers available in the list: 4
```

