

#1. Create a lambda function that multiplies argument x with argument y.

```
a = lambda x,y:x*y  
print("Multiplication of two numbers is:",a(50,50))
```

Output: -

```
Multiplication of two numbers is: 2500
```

#2. Write a python program to create Fibonacci series to n using lambda.

```
from functools import reduce  
f = lambda n:reduce(lambda x, _:x+[x[-1]+x[-2]],range(n-2),[0,1])  
print("Fibonacci series upto 5:\n",f(5))  
print("Fibonacci series upto 13:\n",f(13))
```

Output: -

```
Fibonacci series upto 5:-  
[0, 1, 1, 2, 3]  
Fibonacci series upto 13:-  
[0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144]
```

#3. Write a Python program that multiply each number of given list with a given number.

```
my_list = [1,2,3,4,5]  
num = 5  
print("Original list:",my_list)  
print("Given number:",num)  
multiplied_list = list(map(lambda n:n*num,my_list))  
print("Result:",' '.join(map(str,multiplied_list)))
```

Output: -

```
Original list: [1, 2, 3, 4, 5]  
Given number: 5  
Result: 5 10 15 20 25
```

```
#4. Write a Python program to find numbers divisible by 9 from a list of numbers.  
list1 = [3,6,9,15,30,36,45,65,72,88,90,117,163]  
result = list(filter(lambda x:(x % 9 == 0),list1))  
print(list1)  
print("Numbers divisible by 9 from above list are:",result)
```

Output: -

```
[3, 6, 9, 15, 30, 36, 45, 65, 72, 88, 90, 117, 163]  
Numbers divisible by 9 from above list are: [9, 36, 45, 72, 90, 117]
```

```
#5. Write a Python program to count the even numbers in a given list of integers.  
mylist = [1,4,5,7,8,10,13,16,18,19,21]  
even_no = len(list(filter(lambda x:(x%2==0),mylist)))  
print(mylist)  
print("Number of Even numbers in above list is:",even_no)
```

Output: -

```
[1, 4, 5, 7, 8, 10, 13, 16, 18, 19, 21]  
Number of Even numbers in above list is: 5
```