***Day 16 task***

### ***Create a lambda function that multiplies argument x with argument y***

r = **lambda** x, y : x \* y

print(r(8, 5))

***Output:-***

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### ***Write a Python program to create Fibonacci series to n using Lambda***

**from** **functools** **import** reduce

fib = **lambda** n: reduce(**lambda** x, \_: x+[x[-1]+x[-2]],

range(n-2), [0, 1])

print(fib(11))

***Output:-***

[0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55]

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

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)))

***Output:-***

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

Given number: 2

Result:

4 8 12 18 22

### ***Write a Python program to find numbers divisible by 9 from a list of numbers***

list1=[2,4,5,6,7,8,9,21,12,14,15,27,36,81]

print(list1)

list2=list(map(**lambda** j:j%9==0,list1))

print("Result")

print(' '.join(map(str,list2)))

list2=list(filter(**lambda** j:j%9==0,list1))

print("Result")

print(' '.join(map(str,list2)))

***Output:-***

[2, 4, 5, 6, 7, 8, 9, 21, 12, 14, 15, 27, 36, 81]

Result

False False False False False False True False False False False True True True

Result

9 27 36 81

### ***Write a Python program to count the even numbers in a given list of integers***

list1=[2,4,5,6,7,8,9,21,12,14,15,27,36,81]

print(list1)

list2=list(filter(**lambda** j:j%2==0,list1))

print("Result :")

print(len(list2))

***Output:-***

[2, 4, 5, 6, 7, 8, 9, 21, 12, 14, 15, 27, 36, 81]

Result :

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