Task – 16

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# Task - 16

# 1. Create a lambda function that multiplies argument x with argument y
A = lambda x, y: x*y
print("multiplication  of two number :",A(5,6))
```

output :-

```
multiplication of two number : 30
```

```
# 2.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("Fibonacci series upto 2:\n",fib(2))
print("Fibonacci series upto 5:\n",fib(5))
print("Fibonacci series upto 9:\n",fib(9))
```

output :-

```
Fibonacci series upto 2:
 [0, 1]
Fibonacci series upto 5:
 [0, 1, 1, 2, 3]
Fibonacci series upto 9:
 [0, 1, 1, 2, 3, 5, 8, 13, 21]
```

```
# 3. Write a Python program that multiply each number of given list with a
    given number
nums = [1, 4, 8, 15]
n = 3
print("original  list : ", nums)
print("given  number : ", n)
filtered_numbers=list(map(lambda number:number*n,nums))
print("Result:",  '  '.join(map(str,filtered_numbers)))
```

output :-

```
original list :  [1, 4, 8, 15]
given number :  3
Result: 3  12  24  45
```

```
# 4. Write a Python program to find numbers divisible by 9 from a list of
    numbers
my_list = [4, 15, 18, 26, 31, 36, 59, 81, 99, 105, 117, 128]

result = list(filter(lambda x: (x % 9 == 0), my_list))
print("my_list : ", my_list)
print("\nNumbers divisible by 9 are " , result)
```

output :-

```
my_list :  [4, 15, 18, 26, 31, 36, 59, 81, 99, 105, 117, 128]

Numbers divisible by 9 are  [18, 36, 81, 99, 117]
```

```
# 5. Write a Python program to count the even numbers in a given list of
    integers

my_list  = [2, 6, 23, 31, 78, 52, 87, 97]

even_num = len(list(filter(lambda x: (x % 2 == 0), my_list)))

print("Even numbers in the list : ",even_num)
```

output :-

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