• Day 16 – Lambda

• Create a lambda function that multiplies argument x with argument y

In [6]:

```
x=int(input("Enter num1:"))
y=int(input("Enter num2:"))
z=lambda x,y:x*y
print(z(x,y))
```

```
Enter num1:6
Enter num2:8
48
```

• Write a Python program to create Fibonacci series to n using Lambda

In [7]:

```
from functools import reduce

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

In [9]:

```
print(fib_series(8))
```

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

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

In [10]:

```
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)))
```

```
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

In [12]:

```
# Take a list of numbers
my_list = [18, 65, 54, 39, 102, 36, 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)
```

```
Numbers divisible by 9 are [18, 54, 36]
```

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

In [13]:

```
# list of numbers
list1 = [10, 21, 4, 45, 66, 93, 11]
even_nos = list(filter(lambda x: (x % 2 == 0), list1))

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

```
Even numbers in the list:  [10, 4, 66]
3
```

In [ ]:

```

```