Day 8

```
def square(x):
    return x**2
a=[4,9,13,21,77,32,15,6]
map(square,a)
<map object at 0x000001DE768B5DB0>
list(map(square,a))
[16, 81, 169, 441, 5929, 1024, 225, 36]



def even(x):
    return x%2==0

a=[4,9,13,21,77,32,15,6]
list(map(even,a))
[True, False, False, False, False, True, False, True]
square=lambda x:x**2
square(3)
9
square(100)
10000
even=lambda x:x%2==0
o/p
even(10)
True
even(11)
False
```

map(lambda x:x2,a)**

<map object at 0x000001EA88E25DB0>

list(map(lambda x:x2,a))**

[16, 81, 169, 441, 5929, 1024, 225, 36]

Module

```
def addition(a,b):
    return a+b
def substraction(a,b):
    return a-b
def multiplication(a,b):
    return a*b
def division(a,b):
    return a/b
def power(a,b):
    return a**b
```

```
from module import addition,substraction,multiplication
print(addition(10,20))
print(substraction(10,20))
print(multiplication(10,20))
```

```
from module import *
print(addition(10,20))
print(substraction(10,20))
print(multiplication(10,20))
```

o/p

30

-10

200

import math

math.sin(1.57)

0.9999996829318346

math.factorial(5)

120

math.pi

3.141592653589793

math.sin(math.pi/2)

1.0

math.e

2.718281828459045

math.exp(2)

7.38905609893065

math.log10(10)

1.0

math.log(10)

2.302585092994046

math.radians(180)

3.141592653589793

math.sqrt(121)

11.0

math.pow(3,4)

81.0

Package

Pip install colorama

Python

From colorama import init

Init()

From colorama import Fore

Print(Fore.RED+”red text”)