

Day -15

Date: 25-09-25

## - lambda function

- \* It's a small, anonymous function
- \* defined using the keyword lambda instead of def
- \* Can take any number of arguments but must contain only one expression
- \* expression is automatically returned (no need to use return)

lambda argument : expression

S = lambda a,b:a+b

S(6,9)

%p: 15

C = lambda a:a\*\*3

C(9)

o/p: 729

1. Function as parameter

2. Nested function

3. Recursion function.

1. Function as parameter - You can pass a function as an argument to another function.

2. Nested function - A function defined inside another function.

3. Recursion function - A function that calls itself until a base condition is met.

#create a function to check given number is prime number or not using with input without return

Code:

```
def prime(num):
    for i in range(2,num,1):
        if(num%i==0):
            print(f'{num} is not a prime number')
            break
    else:
        print(f'{num} is prime number')
```

prime(8)

8 is prime number

#create functions to print prime numbers from given range using with input and without return

Code:

```
r1=int(input("r1="))
r2=int(input("r2="))
def prime_num(r1,r2):
    for i in range(r1,r2+1,1):
        for j in range(2,i,1):
            if(i%j==0):
                break
    else:
        print(i)
```

prime\_num(2,7)

2  
3  
5  
7

#create a fun to find largest among three numbers  
using with input and with return

Code:

```
def large(x,y,z):  
    if(x>y and x>z):  
        return f'{x} is largest "  
    elif(y>x and y>z):  
        return f'{y} is largest"  
    else:  
        return f'{z} is largest"
```

large(4,9,1)

'9 is largest'