Day - 14 Date - 24/09/2025

- Function : is a block of reusable code that perform specific task.

• It helps make your code organized, readable and easy to maintain

• functions help in making the code modular, organized and readable, reduce repeatation

• always represented by ()

Types of functions

1) Built-in functions - already available in python
eg: print(), len(), input(), ...

2) user defined functions - functions created by user using def keyword

```
syntax: def fun-name (parameters):
                statements
                return value
```

lambda function:

3) Anonymous function (nameless) function written in single line using lambda keyword

① function without input without output

```
def si1():                  | def fun-name():
                            |       statements
   p= float(input("pvalue=")) # principle amount
   t=float(input("tvalue=")) #time
   ~~si~~= float(input("r value=")) #rate of interest
   si= p*t*r/100
   print(f"simple interest {si} for p={p}, t={t}, r={r}")
si1()
```

o/p:

```
pvalue = 3000.0
tvalue = 2
rvalue = 2.5
simple interest 1500.0  for p =3000.0, t=2 , r=2.5
```

② function with input and without return

```
def fun-name (p1, p2, ... pn):
        Statements
```

->

```
def si2(p,t,r):
    si = (p*t*r)/100
    print(f"simple interest is {si} for pa={p}, t={t}, r={r}")
si2(2500,3,4)
```

o/p:

```
simple interest is 300.0 for pa=2500, t=3, r=4
```

③ function without input and with return

```
def fun_name():
        Statements
        return value
```

->

```
def si3():
    p = float(input("enter p"))
    t = float(input("enter t"))
    r = float(input("r value"))
    si = p*t*r /100
    return p,t,r,si
```

__/__/__

4) function with input and with return

```
def fun_name (p1, p2, p3, ..., pn):
        statements
        return value
```

```
-> def si4(p,t,r):
        si = (p*t* r) /100
        return si

   si5 = si4(4000,2,1)
o/p-> 80.0
```