

## What is function?

Reusable block of code that performs specific task

- Code reusability
- Modularity
- Readability
- Maintainability

Ex:- Task → create circle

and

color it.

→ func to create circle

→ func to color the shape

## Define functions

```
def function_name(parameters):
    """
        Doc string (optional)
    # Code block
    return value
```

Keyword create fun

(def greet():)

print("Hello function")

→ Name or function

→ function body.

```
defining function
def greet():
    print("Hello Python function")
#Function call
greet()
```

② ↓ def greet(): ←

    print("Hello")

③ [ ] # Call function

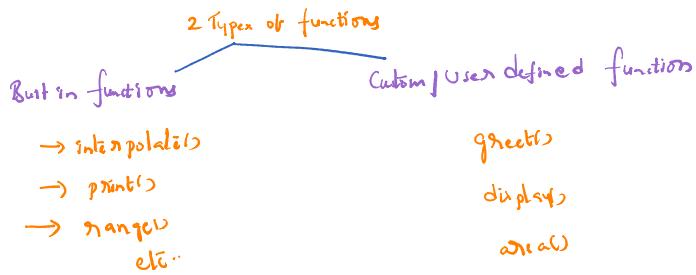
        greet()

            print ("outside function")

①

## Type of arguments

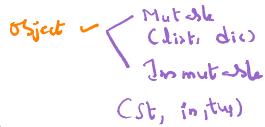
- ① Positional arguments
- ② Keyword Arguments
- ③ Default arguments
- ④ Variable-length arguments



Variabls are reference to objects.

↳ When we pass to functions

↳ behaviour depends on



→ pass by reference

↳ list, dictionary

Mutable object → changes inside function affect

→ pass by value original object

Immutable object ↳ str, int, tuple

↳ Original values remains unchanged