

## Experiment – 8

**Aim:** Create a user-defined function with different types of arguments.

**Objective 1:** Write a Program to create a user-defined function with different types of function arguments.

### Program 1:

#Function with no arguments

```
def greet():  
    """This function displays 'Hello World!"""  
    print("Function with No arguments")  
    print('Hello World!')  
greet()
```

#Function with one arguments

```
def greet(name):  
    print("Function with Single Arguments")  
    print ('Hello ', name)
```

# calling function with argument

```
greet('Steve')  
greet(123)
```

#Function with multiple arguments

```
def greet(name1, name2, name3):  
    print("Function with Multiple Arguments")  
    print ('Hello ', name1, ' ', name2, ' ', and ' ', name3)
```

# calling function with string argument

```
greet('Steve', 'Bill', 'Yash')
```

#Function with Keyword Arguments

```
def greet(firstname, lastname):  
    print("Function with Keyword Arguments")  
    print ('Hello', firstname, lastname)
```

# passing parameters in any order using keyword argument

```
greet(lastname='Jobs', firstname='Steve')
```

#Function with Unknown Arguments

```
def greet(*names):  
    print("Function with Unknown Arguments")  
    print ('Hello', names[0], names[1])
```

```
greet('Steve', 'Bill', 'Yash')
```

#Function with Unknown Keyword Arguments

```
def greet(**person):  
    print("Function with Unknown Keyword Arguments")  
    print('Hello ', person['firstname'], person['lastname'])
```

```
greet(firstname='Steve', lastname='Jobs')  
greet(lastname='Jobs', firstname='Steve')  
greet(firstname='Bill', lastname='Gates', age=55)
```

**Output:**

Function with No arguments

Hello World!

Function with Single Arguments

Hello Steve

Function with Single Arguments

Hello 123

Function with Multiple Arguments

Hello Steve , Bill , and Yash

Function with Keyword Arguments

Hello Steve Jobs

Function with Unknown Arguments

Hello Steve Bill

Function with Unknown Keyword Arguments

Hello Steve Jobs

Hello Steve Jobs

Hello Bill Gates

**Objective 2: Create user-defined function using default and keyword arguments to display employee details.**

**Program 2:**

```
def employee(name, age, salary):  
    print("Employee name:", name)  
    print("Employee age:", age)  
    print("Employee salary:", salary)  
    print()
```

```
# function which passes the employee details  
employee("Jack", 22, 20000)
```

```
def employee(name, age, salary):  
    print("Employee name:", name)  
    print("Employee age:", age)  
    print("Employee salary:", salary)  
    print()
```

```
# function where the user enters the employee details in the wrong order  
employee(22, "Jack", 20000)
```

```
def employee(name, age, salary):  
    print("Employee name:", name)  
    print("Employee age:", age)  
    print("Employee salary:", salary)  
    print()
```

```
# function in which details of the employee are passed along with their parameters name  
employee(salary = 21000, age = 23, name = "Jhon")
```

```
def employee(name, age = 23, salary = 20000):  
    print("Employee name:", name)  
    print("Employee age:", age)  
    print("Employee salary:", salary)
```

```
employee(salary = 21000, name = "Jhon")
```

**Output:**

Employee name: Jack  
Employee age: 22  
Employee salary: 20000

Employee name: 22  
Employee age: Jack  
Employee salary: 20000

Employee name: Jhon  
Employee age: 23  
Employee salary: 21000

Employee name: Jhon  
Employee age: 23  
Employee salary: 21000