



## **\*ARGS AND \*\*KWARGS in Python:**

**\*args** and **\*\*kwargs** are special syntax in Python used for function definitions, allowing you to pass a variable number of arguments and keyword arguments, respectively, to a function.

### **\*args:**

**\*args** is used to pass a variable number of positional arguments to a function. It collects all the positional arguments passed to the function into a tuple.

### **Example:**

```
python Copy code

def my_function(*args):
    for arg in args:
        print(arg)

my_function(1, 2, 3)
```

### **Output:**

```
Copy code

1
2
3
```

### **\*\*kwargs:**

**\*\*kwargs** is used to pass a variable number of keyword arguments to a function. It collects all the keyword arguments passed to the function into a dictionary.

### **Example:**

```
python Copy code

def my_function(**kwargs):
    for key, value in kwargs.items():
        print(key, value)

my_function(name="Alice", age=30)
```



## Output:

```
Copy code

name Alice
age 30
```

In this example, `**kwargs` collects the keyword arguments `name="Alice"` and `age=30` into a dictionary named `kwargs`.

## Combined usage:

You can also use `*args` and `**kwargs` together in a function definition to accept both positional and keyword arguments.

## Example:

```
def my_function(*args, **kwargs):
    print("Positional arguments:")
    for arg in args:
        print(arg)
    print("Keyword arguments:")
    for key, value in kwargs.items():
        print(key, value)

my_function(1, 2, 3, name="Alice", age=30)
```

## Output:

```
yaml Copy code

Positional arguments:
1
2
3
Keyword arguments:
name Alice
age 30
```

In this example, the function `my_function` accepts both positional arguments `(1, 2, 3)` and keyword arguments `name="Alice"` and `age=30`.



## CODE:

```
def funargs(normal, *argsmohan, **kwargsriya):
    print(normal)
    for item in argsmohan:
        print(item)
    print("\n Now I would like to introduce same of our heros")
    for key,value in kwargsriya.items():
        print(f"{key} is a {value}")

# function name print("pentest", "hacker", "Amit")
har = ["ankur", "neeraj", "abhishek", "vivek", "robin", "The Programmer"]
normal = "I am a normal argument & the student are :"
kw = {"pentest": "Monitor", "hacker": "fitness", "the programmer": "coordinator", "shiva": "cook"}
funargs(normal, *argsmohan: *har, **kw)
```

## Output:

```
/root/PycharmProjects/pythonProject/.venv/bin/python /root/PycharmProjects/pythonProject/25.py
I am a normal argument & the student are :
ankur
neeraj
abhishek
vivek
robin
The Programmer

    Now I would like to intorduce same of our heros
pentest is a Monitor
hacker is a fitness
the programmer is a coordinator
shiva is a cook
```