

Default Parameters

Definition:

- Default parameters allow you to define functions with default values for parameters.
- If an argument for a parameter with a default value is not provided, the default value is used.

```
def function_name(parameter1=default_value1, parameter2=default_value2):
```

```
    # Function body
```

Multiple Arguments

Variable-length Arguments:

- Used when you don't know the number of arguments that will be passed to the function.
- There are two types: `*args` and `**kwargs`.

Using args:

- Allows a function to accept any number of positional arguments.
- `args` is a tuple of arguments.

```
def function_name(*args):
```

```
    for arg in args: print(arg)
```

Using kwargs:

- Allows a function to accept any number of keyword arguments.
- `kwargs` is a dictionary of arguments.

```
def function_name(**kwargs):
```

```
    for key, value in kwargs.items():
```

```
        print(f"{key}: {value}")
```

Python Try, Exception Handling & Lambda Functions

Exception Handling

Allows you to handle errors gracefully without crashing the program.

Try-Except Block:

try:

 # Code that may raise an exception except

ExceptionType:

 # Code to handle the exception

Finally Block:

The finally block executes regardless of whether an exception occurs or not.

try:

 # Code that may raise an exception except

ExceptionType:

 # Code to handle the exception

finally:

 # Code to execute no matter what

Lambda Functions

- A lambda function is a small anonymous function defined using the lambda keyword.
- Typically used for short, simple functions.

lambda arguments: expression