SCIFOR TECHNOLOGIES

Introduction:

Functions play a crucial role in structuring and organizing code in Python. They allow you to break down a program into smaller, manageable pieces, making your code more readable, reusable, and maintainable. In this document, we will explore various aspects of functions in Python, including defining functions, passing arguments, returning values, and more.

Defining Functions:

```python
def function_name(parameters):
    """docstring"""
    # function body
    return expression

def greet(name):
    """This function greets the person passed in as a parameter."""
    print(f"Hello, {name}!")

# Function call
greet("Alice")
```

Positional Arguments:

```python
def add(a, b):
    return a + b

result = add(3, 5)  # Output: 8
```

Keyword Arguments:

```python
def subtract(a, b):
    return a - b

result = subtract(b=5, a=3)  # Output: -2
```