Tutorial: Functions in Python

Functions are a way to group code that performs a specific task, making your code more modular and easier to read.

The follow along the videos and the tutorials using the online Python editor https://www.online-python.com/.

Videos: - Python Functions - https://www.youtube.com/watch?v=eOEp5YrL6v0 - Functions and Parameters - https://www.youtube.com/watch?v=6SI2RZ1gTcA - Functions and Return Values - https://www.youtube.com/watch?v=oS70q9nuL-E

Here's a tutorial on how to define and use functions in Python:

Defining a Function

You define a function using the `def` keyword, followed by the function name and parentheses. Any arguments the function takes are placed within the parentheses.

```python
def greet(name):
    print("Hello, " + name + "!")
```

Calling a Function

To call a function, simply write its name followed by parentheses, optionally passing in any required arguments.

```python
greet("Alice")   # Output: Hello, Alice!
greet("Bob")     # Output: Hello, Bob!
```

Return Statement

Functions can return a value using the `return` statement. This allows you to use the result of a function call in other parts of your code.

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

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

- Activity: Function - Return Values

Default Arguments

You can provide default values for function arguments. If the caller doesn't specify a value for an argument, the default value is used.

```python
def greet(name="World"):
    print("Hello, " + name + "!")

greet()          # Output: Hello, World!
greet("Alice")   # Output: Hello, Alice!
```

More Tutorial Resouces

Want to learn more? Checkout the following with examples to work. - https://www.w3schools.com/python/python_functions.asp