

# The difference between function and method

## Function:

1. A function is a standalone piece of code that performs a specific task.
2. It can be called by name and explicitly passed data (parameters).
3. Functions are independent and not tied to any object or class.
4. They can return a value (the return value) based on their computation.
5. Examples of functions include mathematical calculations, utility functions, or custom operations.

## Method:

1. A method is also a piece of code, but it is associated with an object or a class.
2. It operates on data contained within the class (class members or instance variables).
3. When a method is called, it is implicitly passed the object on which it was invoked
4. Methods can access and modify the object's state.
5. In most respects, methods are similar to functions, but they have this additional association with objects.

In summary, while both methods and functions perform specific tasks, methods are closely tied to objects and can operate on their internal data, whereas functions are more independent and can be called from anywhere in the code.