Beginner's Guide to Functions in START Programming

Functions are reusable blocks of code that perform a specific task. They help in organizing code, making it more readable, and reducing redundancy. In START, functions can take parameters and return values. Let's explore how to define and use functions effectively.

Defining Functions

In START, you can define functions using the following syntax:

```
function function_name(parameter1, parameter2, ...) {
    // Code block to execute
}
```

- `function_name`: The name of the function.
- `parameter1, parameter2, ...`: Parameters that the function accepts.
- `{}`: The code block that defines the behavior of the function.

Example Functions

Let's define and use two example functions:

Function with Output

```
function new_func(a, b) {
    write(a add b) nl
}
```

This function `new_func` takes two parameters `a` and `b`, adds them together, and prints the result.

Function with Return Value

```
function new_func2(a, b) {
    return a add b
}
```

This function `new_func2` also takes two parameters `a` and `b`, adds them together, and returns the result. They are returned to a variable where the value is stored.

Calling Functions

You can call functions by using their names and passing arguments (if required).

Calling Functions without Return Value

```
new_func(5, 3)
```

This statement calls the `new_func` function with arguments 5 and 3. It will print the result of adding 5 and 3.

Calling Functions with Return Value

```
a is new_func2(5, 5)
```

This statement calls the `new_func2` function with arguments 5 and 5. It assigns the returned value (10) to the variable `a`.

Note on Function Declaration

Functions must be declared before they are called in your code.

Conclusion

Functions are essential building blocks in programming that allow you to modularize your code and make it more reusable. By understanding how to define, call, and use functions effectively, you'll be able to write more organized and efficient code. Practice creating and using functions with different parameters and return values to become proficient in using functions in your programs.