

Earth Engine Functions



Google Earth Engine Developer Community Nairobi

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Whats a function?

A function is a set of instructions to perform a specific task.

Function Structure

- Code
- Function
- Name_of_function
- Input parameters
- Call the function



Explanation

Code: Wrapped inside the function; includes what the function does.

Function: Written in lowercase in javascript.

Name of function: The word function is followed by the name we would like to call our function. We can name our function anything we would like, the same rules and style suggestions of how to name variables apply to naming functions (can't start with a number, should be descriptive of what it does).

Parameters: In between our function name and our first curly brace we need to add parenthesis. These are filled with the set of input parameters that the user passes to the function, if there are none it can be left empty.



```
//Basic structure of a function
```

```
function name_of_function (parameter_1, parameter_2) {  
  // code to execute  
  // more code to execute  
  // ...  
}
```

```
// call the function
```

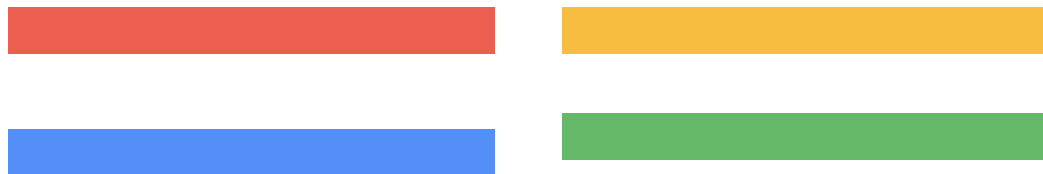
```
name_of_function(input_1, input_2);
```



Global & Local Variables

A *local variable* is a variable that is declared inside of a function. Unlike a global variable, a local variable may only be used inside of the function it is declared in. A variable defined outside a function is a “*global variable*” and is visible everywhere, including inside functions.

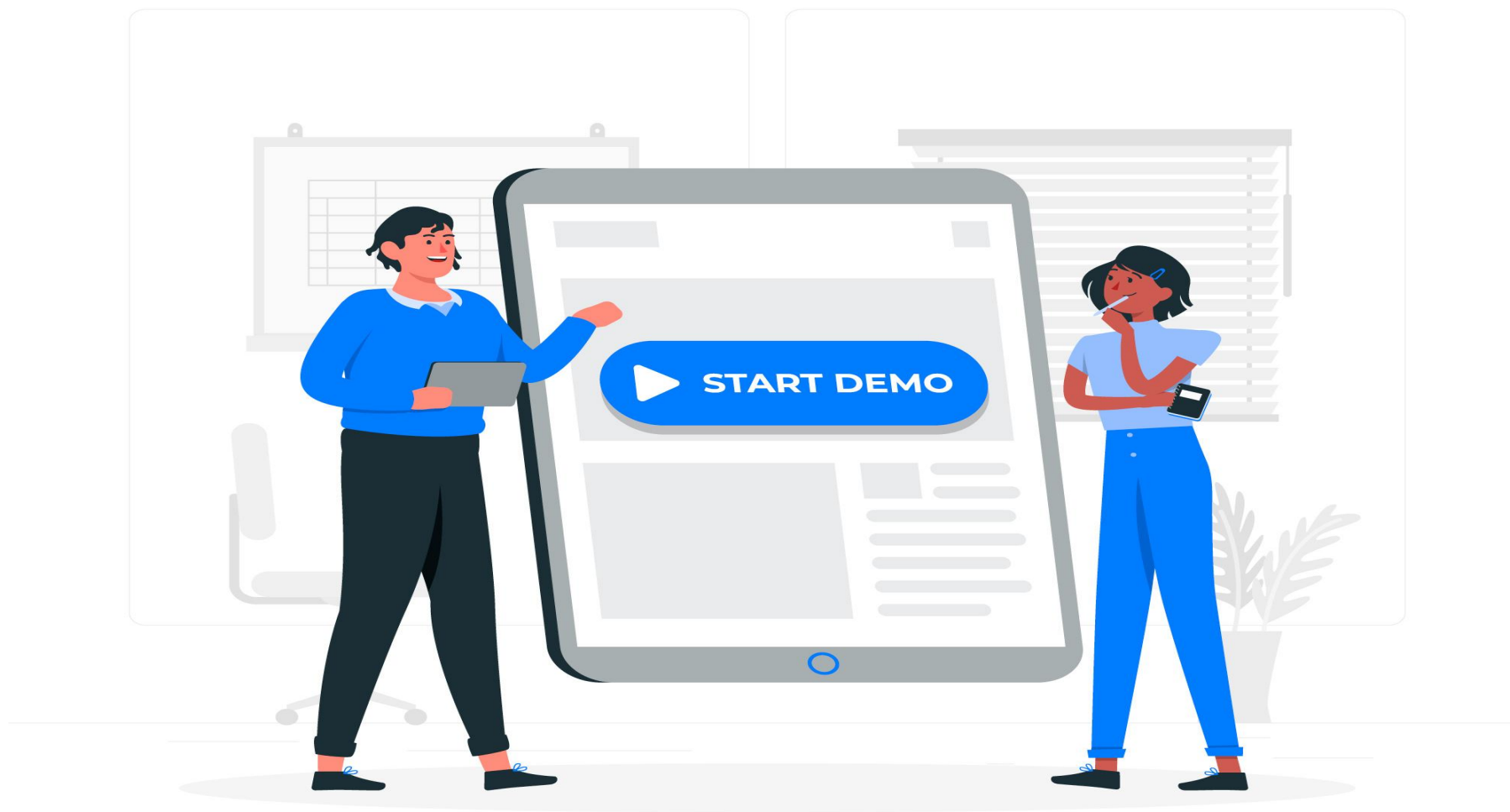
We use “Return” to save the output as a global variable.



Global & Local Variables

```
// LOCAL & Global Variables
```

```
function calculate_divide (num1, num2) {  
  var diivide = ee.Number(num2).add(ee.Number(num2)); // code that cal  
    print("Local variable, Sum, = ", diivide);  
    return diivide; // here we use return  
}  
// Now call and save the output of the function.  
// Save it as a variable, Sum_test.  
var divide_test = calculate_divide(5, 2);  
  
//function call  
print("The global variable, divide_test, = ", divide_test);
```

Thank you!



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Resources



https://developers.google.com/earth-engine/tutorials/tutorial_js_03

Platforms



Google Earth Engine



Google
Big Query



Google
Compute
Engine



Google Earth Engine

Google Earth Engine



Google
Kubernetes Engine



App Engine