

## A Better Testing Function

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Our current testing function is very simple, it only tests if one value works:

#### *Test Double Number FUNCTION*

```
def test_DoubleNumber():

    OurCheck = DoubleNumber(3)
    if (OurCheck == 6):
        print("This test was passed.")
    else:
        print("We better check DoubleNumber!!!")
    #EndIf;

# END test_DoubleNumber.
```

We can make it a lot more flexible by changing the value being fed into the `DoubleNumber` function (3) and the expected output (6) into variables that are passed into the function as parameters, as follows:

#### *Test Double Number FUNCTION – Version 2*

```
def test_DoubleNumber2( TestValue, ExpectedOutput ):

    OurCheck = DoubleNumber( TestValue )
    if ( OurCheck == ExpectedOutput ):
        print("This test was passed.")
    else:
        print("We better check DoubleNumber!!!")
    #EndIf;

# END test_DoubleNumber2.
```

And now we can easily test a wide range of values, as follows:

```
test_DoubleNumber2(3, 6)
test_DoubleNumber2(0, 0)
test_DoubleNumber2(-5, -10)
test_DoubleNumber2(0.1, 0.2)
```

And if we get an error in any or all of the tests, we can keep changing the `DoubleNumber` function until it is working properly, and get the following output:

```
This test was passed.
This test was passed.
This test was passed.
This test was passed.
```

So it's important to remember that we may have to run and rerun the same test many times. If we get an error, then we will have to fix the function being tested, and rerun the tests again to check if it is fixed, and keep rerunning for all changes.

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