**Resistor Color**

In Practice Mode

Introduction

Resistors have color coded bands, where each color maps to a number. The first 2 bands of a resistor have a simple encoding scheme: each color maps to a single number.

These colors are encoded as follows:

* Black: 0
* Brown: 1
* Red: 2
* Orange: 3
* Yellow: 4
* Green: 5
* Blue: 6
* Violet: 7
* Grey: 8
* White: 9

Mnemonics map the colors to the numbers, that, when stored as an array, happen to map to their index in the array: Better Be Right Or Your Great Big Values Go Wrong.

More information on the color encoding of resistors can be found in the [Electronic color code Wikipedia article](https://en.wikipedia.org/wiki/Electronic_color_code)

Getting Started

Make sure you have read the "Guides" section of the [C track](https://exercism.io/my/tracks/c) on the Exercism site. This covers the basic information on setting up the development environment expected by the exercises.

Passing the Tests

Get the first test compiling, linking and passing by following the [three rules of test-driven development](http://butunclebob.com/ArticleS.UncleBob.TheThreeRulesOfTdd).

The included makefile can be used to create and run the tests using the test task.

make test

Create just the functions you need to satisfy any compiler errors and get the test to fail. Then write just enough code to get the test to pass. Once you've done that, move onto the next test.

As you progress through the tests, take the time to refactor your implementation for readability and expressiveness and then go on to the next test.

Try to use standard C99 facilities in preference to writing your own low-level algorithms or facilities by hand.