# Resistor color code calculator

## Short description:

A resistor color code calculator calculates the resistance of a given resistor based on the colors of its bands. These bands could either be 3, 4, 5 or 6 in number. These colors have particular values based on their position on the resistor.

Considering a 3 band resistor, the first color gives the first digit of the resistance, the second color gives the second digit of the resistance while the third band gives the order of the resistance. That is, the third band gives the resistance in powers of ten (multiplier).

For a 4 band resistor, the first 3 bands give the resistance of the resistor just like the 3 band resistor while the fourth band gives the tolerance of the resistance.

For a 5 band resistor, the first, second and third bands of the resistor give the first, second and third digits of the resistance, while the fourth band gives the multiplier, and the fifth gives the tolerance of the resistance.

The 6 band resistor’s first 5 bands are similar to those of the 5 band resistor. The sixth band here serves to give the temperature coefficient of resistance of the resistor in parts per million (ppm).

## Principal project expectations:

* Make a user interface (UI) through which the user will interact with the program.
* Program should be able to read user choice and provide the resistance based on the entry.
* Program should have an executable file.
* User should be able to input new values and get another resistance without needing to rerun the system.

Expected date of completion: 8th of March 2019.