In this task, you will use Tinkercad to create a solution that can control an RGB LED with Arduino.

Unfortunately, there are two variants of the RGB diode, one with a common cathode and one with a common anode. Find out which one you have in TinkerCad or in the laboratory kit.

The goal of the task of creating a program is to read one at the start of the program and then set the diode to that color. You will need to use PWM to be able to control the diode correctly. It may be that you have to implement the PWM function yourself in your application, or does Arduino come with useful functions? Use suitable inputs / outputs to control the diode. The LED should light up with the set color until the program ends.

You can choose in which way you want to implement your solution, but keep in mind that there are a number of different techniques for solving this problem.
In the report, you will also discuss the following issues.

Is it possible to recreate all colors? If not, what is the reason for it?
How effective is your solution? Is CPU time consumed in loops?

Well-commented program code that you have created during the implementation of this laboratory work should be included as an appendix in your laboratory report together with the flow chart and wiring diagram.