ENGINE

Teaching online electronics, microcontrollers and programming in Higher Education

Output 2: Online Course for Microcontrollers: syllabus, open educational resources

Open project leaflet: Module_2-1 pins as outputs

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Erasmus+

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Declaration

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Executive summary

This file contains open projects.

Chapter 1: **Open project 1**

Simulate traffic lights

Draw a circuit in the Proteus Design Suite and write a suitable program that simulates the traffic lights.

- The red light will be ON for 10 seconds
- The orange light will be on for 2 seconds
- The green light will be on for 10 seconds

***Tips**:*

Connect a red LED to pin B0 or the microcontroller.

Connect an orange LED to PIN B1 of the microcontroller.

Connect a green LED to PIN B2 of the microcontroller.

Write a program that will turn on and off the LEDs with the following cycle.

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*Green LED **on** orange LED off, Red LED off: 10 seconds*

*Green LED off orange LED **on**, Red LED off: 2 seconds*

*Green LED off orange LED off, Red LED **on**: 10 seconds*

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