Instituto Superior Técnico

Master's Degree in Information Systems and Computer Engineering

Software for Embedded Systems

1st Lab work: Building an embedded system

Group:		
Student 1:		
Student 2:		
Student 3:		

Goal:

The goal of this work is to put students for the first time in touch with the Arduino environment to drive simple actuators (in the case LEDs).

Description:

Build an embedded system using the Arduino UNO board to control 4 LEDs. Every second one LED must be on, while the other three are off. During a four seconds period all LEDs must be on once. This behavior is then repeated.

The figure represents the circuit to be assembled.

References:

1. https://www.arduino.cc/en/Reference/digitalWrite
2. https://www.arduino.cc/en/Reference/Delay

Recommendations:

In order to develop your work with security, and to avoid damaging the hardware involved, remember to carry out the recommendations below. As you are working fill the boxes to be certain that you fulfill all security measures.

Always work with the circuit disconnect from the source.	
Call the teacher, or the responsible for the laboratory, before you connect the circuit to the source.	

Choose the right resistors:
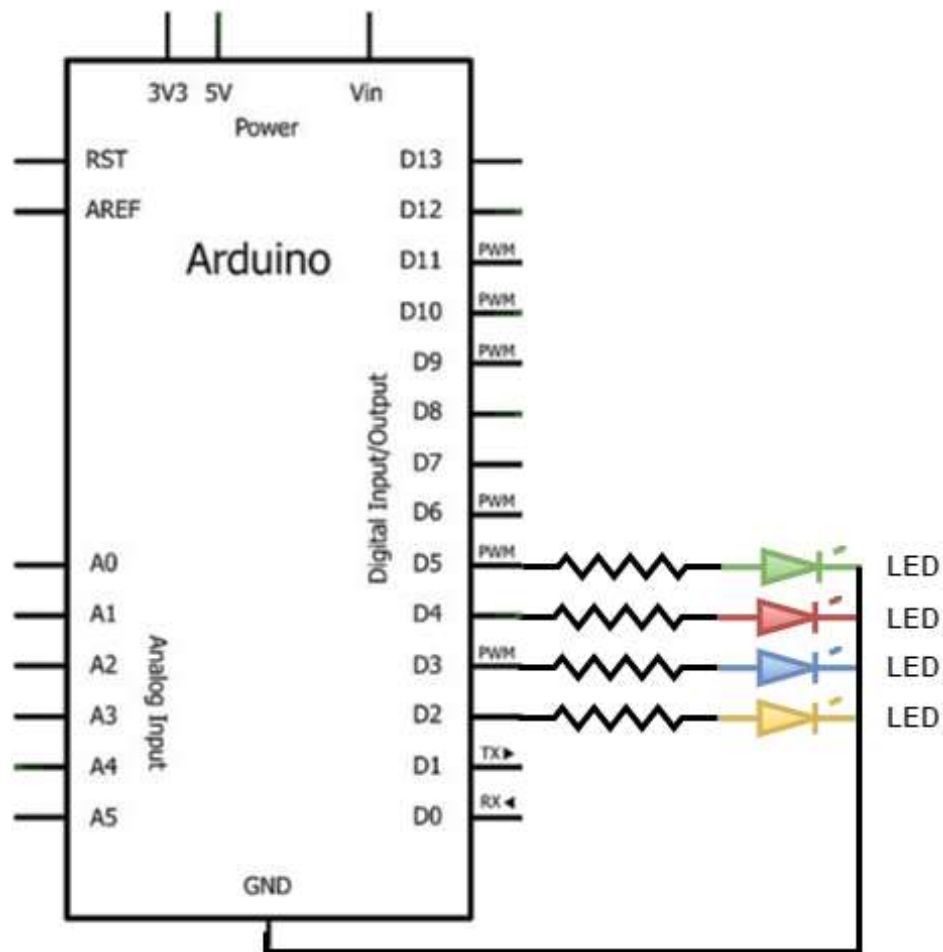
Program the application:

- Code:

```
void setup() {


}
void loop() {





}
```