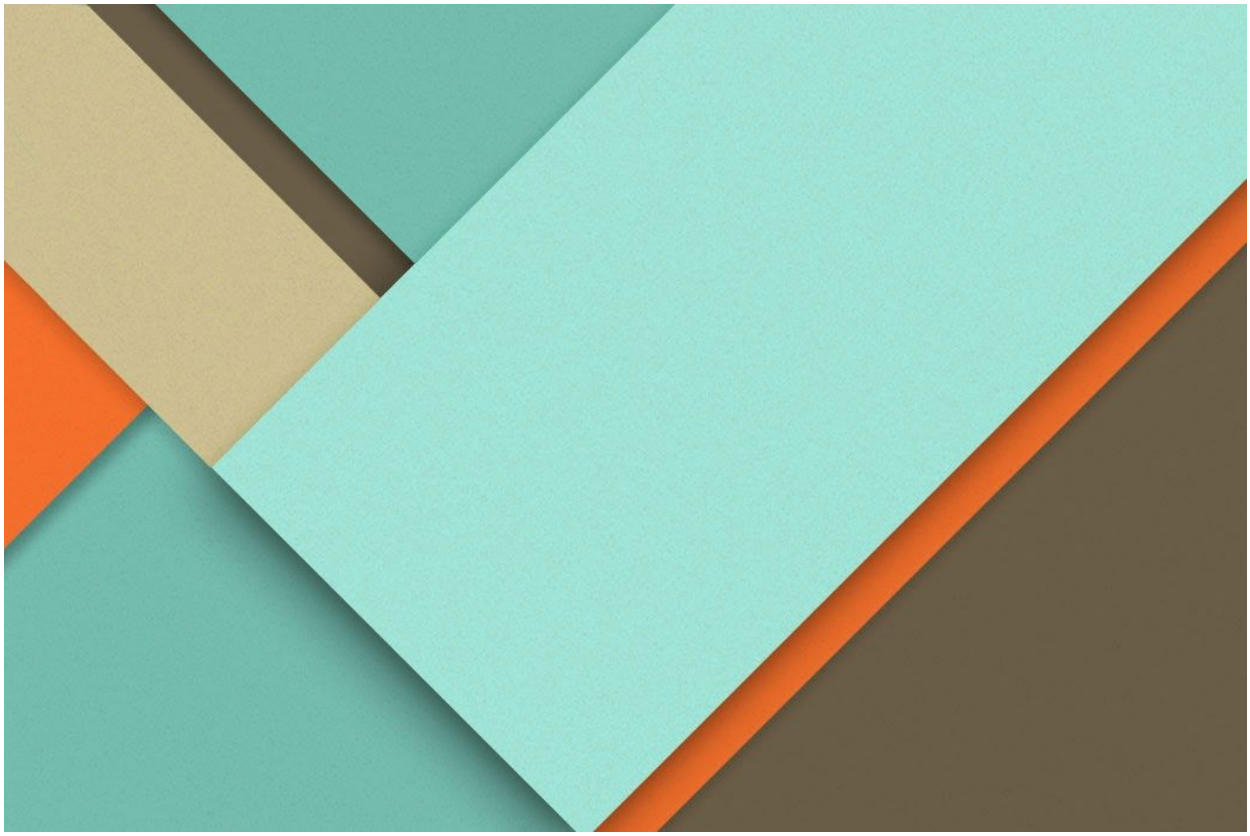

Arduino LAB

Assignment 1.

Afnan Mousa Mabrouk ID : 15

Shimaa Kamal El-deen ID : 34

Overview

Required to implement a Morse Code program, to convert any string to the Morse Code by converting each character in this string to the opposite Morse Code of this character .

Goals

- Implement the International Morse code is composed of five elements:
  - short mark, dot or "dit" (·) : "dot duration" is one time unit long
  - longer mark, dash or "dah" (–) : three time units long
  - inter-element gap between the dots and dashes within a character : one dot duration or one unit long
  - short gap (between letters) : three time units long
  - medium gap (between words) : seven time units long

Overall organization :

- The input is taken from the user as a string, then we iterate on it to do some checks. First we check if the character is a white space or not to perform seven time units delay. If not, we get its morse code from two arrays called "**symbols**" and "**numbers**" which are for letters and numbers respectively.
- Then we iterate on this morse code to check if its character is dash or dot with a function called **"check"** to perform a suitable action. (one time unit delay or three).

The link of the code :

The Code of Morse Code implementation.

Video of the sample runs :

- The link of the video which represents "SOS" in Morse Code using the Arduino UNO : Represent "SOS" in Morse Code