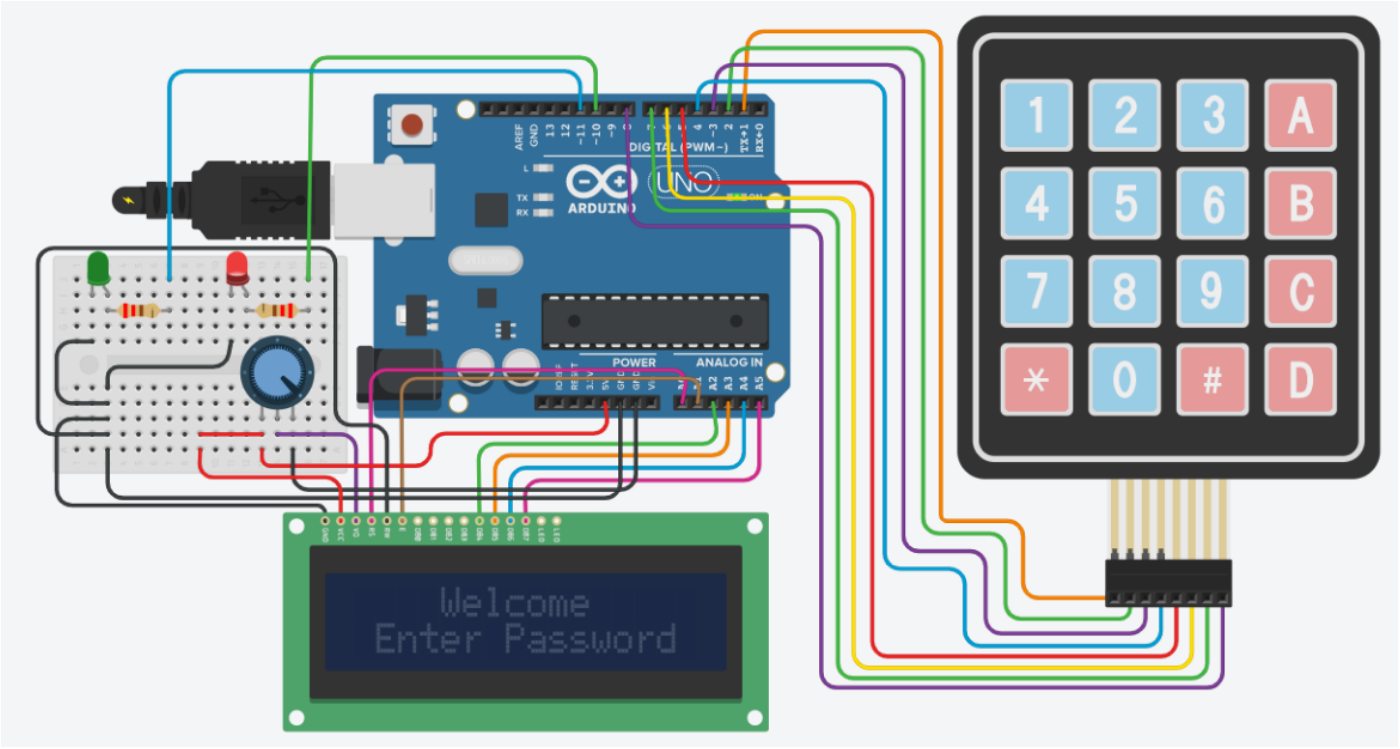
PROYECTO – KEYPAD 4*4 – LCD 16*2 – LED RED Y GREEN




```
/* Arduino Security System with the Keypad and LCD
 * Creator Mert KILIC - Mert Arduino Tutorial and Project
 * Please subscribe for support
 * Thanks
 */
#include <LiquidCrystal.h> //include LCD library (standard
library)
#include <Keypad.h> //include keypad library - first you must
install library (library link in the video description)
#define redLED 10 //define the LED pins
#define greenLED 11

char* password ="1234"; //create a password
int pozisyon = 0; //keypad position

const byte rows = 4; //number of the keypad's rows and
columns
const byte cols = 4;

char keyMap [rows] [cols] = {
//define the cymbols on the buttons of the keypad
  {'1', '2', '3', 'A'},
  {'4', '5', '6', 'B'},
  {'7', '8', '9', 'C'},
  {'*', '0', '#', 'D'}
};
byte rowPins [rows] = {1, 2, 3, 4}; //pins of the keypad
byte colPins [cols] = {5, 6, 7, 8};
Keypad myKeypad = Keypad( makeKeymap(keyMap), rowPins,
colPins, rows, cols);
LiquidCrystal lcd (A0, A1, A2, A3, A4, A5);
// pins of the LCD. (RS, E, D4, D5, D6, D7)
void setup(){
  lcd.begin(16, 2);
  pinMode(redLED, OUTPUT);  //set the LED as an output
  pinMode(greenLED, OUTPUT);
  setLocked (true); //state of the password
}
void loop(){
  char whichKey = myKeypad.getKey();
//define which key is pressed with getKey
  lcd.setCursor(0, 0);
  lcd.print("    Welcome");
  lcd.setCursor(0, 1);
  lcd.print(" Enter Password");
//define invalid keys
  if(whichKey == '*' || whichKey == '#' || whichKey == 'A' ||
  whichKey == 'B' || whichKey == 'C' || whichKey == 'D'){
    pozisyon=0;
    setLocked (true);
    lcd.clear();
    lcd.setCursor(0, 0);
    lcd.print("  Invalid Key!");
    delay(1000);
    lcd.clear();
  }
  if(whichKey == password [pozisyon]){
    pozisyon ++;
  }
  if(pozisyon == 4){
    setLocked (false);
    lcd.clear();
    lcd.setCursor(0, 0);
    lcd.print("*** Verified ***");
    delay(3000);
    lcd.clear();
    lcd.setCursor(0, 0);
    lcd.print("  Mert Arduino");
    lcd.setCursor(0, 1);
    lcd.print("Tutorial Project");
    delay(7000);
    lcd.clear();
  }
  delay(100);
}
void setLocked(int locked){
  if(locked){
    digitalWrite(redLED, HIGH);
    digitalWrite(greenLED, LOW);
    }
    else{
      digitalWrite(redLED, LOW);
      digitalWrite(greenLED, HIGH);
    }
  }
```