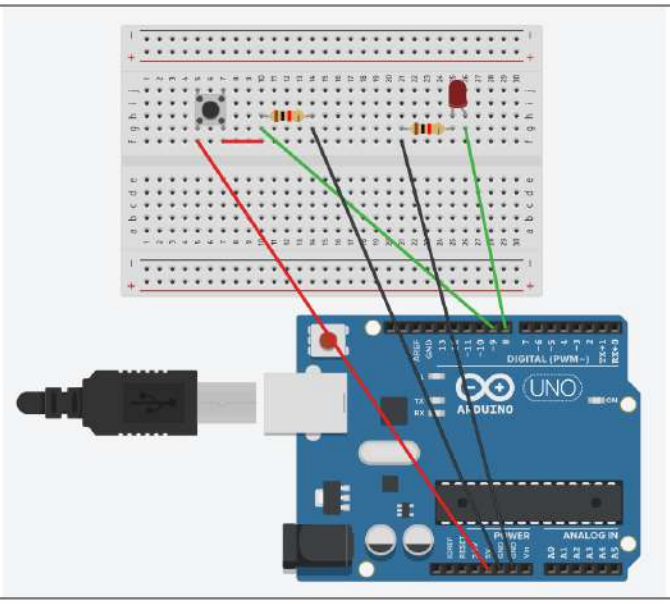
	School of Science and Technology **Computer Science** **Embedded Systems Architecture** *Prof. Lorenzo Morresi*	MSc in Computer Science (LM-18) A.A. 2019-2020
Project Title	**TIMER AND SERIAL MONITOR**	Sheet ARDUINO n_**1.1**
Description	Use the serial monitor of ARDUINO IDE to display the reaction time to press a push button by an external random impulse	
Necessary materials	ARDUINO UNO board 1 LED 1 resistor - 220 Ω 1 resistor - 1 kΩ 1 push button	

Sketch

```
int tempo;
int pinLed = 8;
int buttonPin = 9;
int a;

void setup() {
pinMode(pinLed, OUTPUT);
pinMode(buttonPin, INPUT);
Serial.begin(9600);
}

void loop() {
delay(random(5000,10000));
digitalWrite(pinLed, HIGH);
a=0;
while(digitalRead(buttonPin)==LOW)
{
a++;
delay(1);
}
Serial.println(a);
digitalWrite(pinLed, LOW);
}
```

Pictorial /Schematic		
	Refer to all the instructions reported in the Lecture_#18	