ASSIGNMENT 3

1. Write an Arduino Program with 1 LED and 2 buttons:

* Button 1: Pressing the button starts or stops reading the status of Button 2.
* Button 2 : Tap the button for any number of times.
* The ON/OFF sequence of Button 2 should be the sequence seen in the LED.
* That is, if Button 2 is pressed in the following sequence ON-600 OFF-400 ON-500 OFF-3000, the LED should blink with same sequence.

2. Write a program to vary the brightness of an LED using a transistor as an interface. The range of brightness should be divided into 5 levels. The user can input either 'one', two', ..., 'five' to get the brightness of the corresponding levels.

(If the maximum brightness is 100, each level should be 20. If the user enters ‘three’, the brightness should be corresponding to level three, that is, 60.)