Implement a breathing LED effect on the MSP430 using two hardware timers (Timer0 and Timer1). The LED should gradually increase in brightness (fade in), then decrease (fade out) repeatedly. Use Timer0 to alternate between LED ON and OFF states using variable durations, and Timer1 to gradually update the on/off durations to simulate a smooth breathing pattern. Configure the system using ACLK and low-power mode (LPM3). Provide options to apply this effect to one or two LED’s. (CLO3)

Use Timer0 (TA0) and Timer1 (TA1) and ACLK (32.768 KHz) for Low Power operation LPM3.

Write a code that turns on blinking when push button is pressed and released, turns off when push button is pressed and released again. (CLO 3)