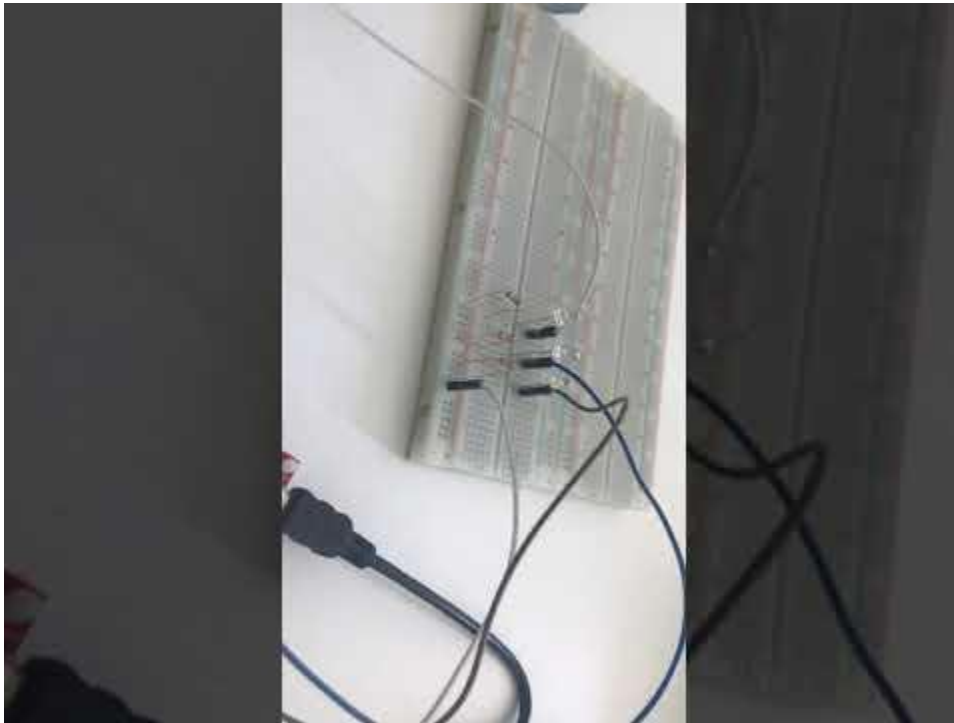


## CENG 329 – Microprocessors

### Project 1

Connect three LEDs to the breadboard and MSP430G2ET and build an animation where first LED goes between ON and OFF for about 10 seconds. Then, second LED makes the same while the first and third ones are OFF. Repeat it for the third LED. Afterwards, return to beginning.

Please click the picture below, it will redirect you to a sample video.



For submissions, upload your video to YouTube, preferably by selecting ‘Unlisted’ rather than ‘Public’. Don’t forget to record yourself about two or three seconds since we need to approve your ownership. Show your Student ID card, too. Append your link to the beginning of your source code as a comment.

Code for single LED is as follows:

```
        bic.b #01000000b, &P2SEL ; Select Digital I/O for
        bic.b #01000000b, &P2SEL2

        bis.b #01000000b, &P2DIR

main:

        bic.b #BIT6, &P2OUT

        mov #1, R5

wait_0:

        add #1, R5
        cmp #0, R5
        jne wait_0

        bis.b #BIT6, &P2OUT ; Turn off LED.

        mov #1, R5

wait_1:

        add #1, R5
        cmp #0, R5
        jne wait_1

        jmp main
```