# Task # 4: PWM with MSP430

## Embedded Systems

## DCSE UET

## Fall-2022

This task consists of two parts,

A. **PWM Generation:** Generate a signal **x** of 2KHz with 75% duty cycle on P1.2. Similarly, generate another signal **y** of 1KHz with 25% duty cycle on P1.3. As soon a user presses a button on P2.1, **x** frequency drops by 100Hz and **y** increases by 100Hz. If x crosses y, an LED at P2.2 is turned ON. Use **low power mode** when nothing is happening. Additionally, use interrupts and not polling in your program.
    a. Use **Timer interrupt** for delay creation

    Bonus Points: Run it on Actual board and show results on Oscilloscope.