

Task 3

MBSD

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Deadline: 10pm on 2/5/2021

- A.** Generate a signal on pin P1.1 having frequency equal to 80 Hz with a duty cycle of 10%.
- B.** When a user presses a button at P1.2 then frequency changes to 40Hz with a 20% duty cycle.
- C.** When a user again presses the same button then frequency changes to 20Hz with a duty cycle of 40%.
- D.** When a user again presses the same button then frequency changes to 10Hz with a duty cycle of 80%.
- E.** Show it on oscilloscope.
- F.** Each time a user presses a button the signal toggles from case A to B, then B to C, then C to D and finally from D to A, on every subsequent button press.
- G.** Program only in C.