EE 308 Microcomputer Based System Design Assigned : 19/04/2021
Lab#4 Pre-lab due : 26/04/2021 17:00

PART I : An Unbiased Dice Roller

The PIC24FJ128GA204 has a cryptographic engine which comes with a random number generator. We would like to use this hardware for implementing an unbiased dice roller that can be used in games such as backgammon.

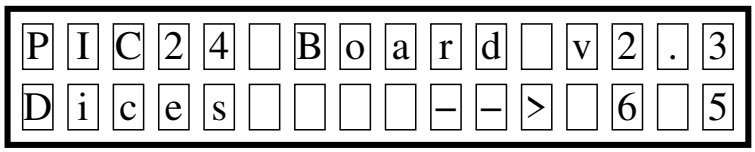

Figure 1: Sample run with a şeş-beş outcome.

You are expected to run the random number generator twice each time the S2 button is pressed, and display the two results in the number range 1–6, as shown in the sample run of Fig. 1.

- Use the C-language template provided in SUCourse, and write your code in C.
- You may read section 22.11 from the datasheet of PIC24FJ128GA204.
- You may include some fancy animation as a dice rolling effect, such as showing "X" and "+" consecutively at the same screen location, or blinking an LED. (This is not required in the preliminary work.)

PART II : In-lab Assignment

You will be asked to make further modifications to your code during the laboratory session.

Note:

Upload your modified code as your pre-lab assignment.

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