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|  | MAKE-UP LAB #5  Advanced EMoRo  Motors, Turns, and Collision Avoidance |  |

This make-up lab exercise is **open book/open notes** and an **individual effort**; however, collaboration is permitted with the four 2/c TOOP Assistants. This make-up lab will allow you to earn up to half the points you missed on Lab #4 (I will take the average of both scores). You must complete this lab via Sloeber. Submit via the D2L dropbox by 0800 on Tuesday, 2 November**.**

1. You are to write a program with several distinct functionalities
   1. In setup…
      1. Initialize in any way you see fit.
   2. Write a function to handle the buttons.
      1. If button one (SW\_1) is pressed, turn clockwise 90 degrees. Print “Turning Right” to the LCD.
      2. If button two (SW\_2) is pressed, turn counterclockwise 90 degrees. Print “Turning Left” to the LCD. You may need to delay half a second after beginning your turn!
      3. If button three (SW\_3) is pressed, turn counterclockwise 180 degrees. Print “Turning Around” to the LCD. You may need to delay half a second after beginning your turn!
      4. If button four (SW\_4) is pressed, travel backwards until the robot is 10 centimeters away from the nearest object. Print “Moving Backwards” to the LCD
   3. In loop…
      1. Call your function from §1.2.