ECE 3140/CS 3420 Embedded Systems Homework 2

- Q1. Explain the difference between polling-based input and interrupt-based input. Use a keyboard as an example.
- Q2. Describe how an interrupt service routine differs from a normal subroutine call. Please include: 1) what the intended use is; 2) how it is invoked; 3) how the code is accessed; 4) how state is preserved, as needed; 5) how execution resumes where it left off after the subroutine/ISR completes. Arrange your response in a comparative table as follows:

| | Subroutine | ISR |
|--|-------------------------------------|-------------------------------------|
| | | |
| How is it invoked? | <explanation here=""></explanation> | <explanation here=""></explanation> |
| How is the code's entry point specified? | <explanation here=""></explanation> | <explanation here=""></explanation> |
| | | |