In our previous lab assignment, we implemented an Arduino Music Box on a breadboard that plays a tune when a push button is pressed. We used the Arduino on a breadboard kit – containing an ATmega328p IC, resistors (2x 10K, 2x 220 ohm), capacitors (2x 22 pF), 1x 16 MHz crystal, 1x LED, 2x push buttons, and 1x CR1220 battery holder – to build our own Arduino on a breadboard. Today, we will create an Eagle schematic of that circuit.

Things to note:
(a) Power the board with a battery; no need to implement the power/voitage regulator circuitry.
(b) Implement a push button that will reset the Arduino.
(c) Implement an LED at Arduino digital pin D13. (This is a common practice on most Arduinos).
(d) Implement a buzzer at Arduino digital pin D9.
(e) Implement the music “play” button on Arduino digital pin D8.
(f) Additionally, implement a 5 pin header that will help when we will program the board.

Circuit