Implement Keypad Software Driver
keypad.c and keypad.h
contains:

1. Keypad_getPressedKey()
2. Keypad_4x3_adjustSwitchNumber()
3. Keypad_4x4_adjustSwitchNumber()

Implement LCD SW Module
LCD.c and LCD.h
contains:

1. LCD_init()
2. LCD_sendCommand()
3. LCD_displayCharacter()
4. LCD_displayString()
5. LCD_goToRowColumn()
6. LCD_displayStringRowColumn()
7. LCD_clearScreen()
8. LCD_intgerToString()

Exercise:

- **Write Embedded c code using ATmega16 µC to control 4x16 LCD Display with 4-bits data mode using 4x4 Keypad.**

- **Requirements:**
  - Configure the µC control with internal 1Mhz Clock.
  - Connect the LCD Data Path to the lower 4-pins on PORTD.
  - Connect the "RS" LCD pin to PB1.
  - Connect the "R/W" LCD pin to PB2.
  - Connect the "E" LCD pin to PB3.
  - 4x4 Keypad is connected at PORTA.
  - If the push button kept pressed, Every 500ms should be treated as a new press.
  - Display the pressed keypad button on the LCD Display.