



```
#include <Wire.h>
#include <LiquidCrystal_I2C.h>

// Set the LCD address to 0x27 for a 16 chars and 2 line display
LiquidCrystal_I2C lcd(0x27, 16, 2);

// Pushbutton pin
const int buttonPin = A0;

// Message to be scrolled
const char message[] = "Welcome to UPLOAD IDEAS WITH ITAMAR      "; // Add
spaces for smoother wrap-around

// Interval for scrolling in milliseconds
const unsigned long scrollInterval = 600; // Fixed scrolling interval

// Length of the message
int messageLength;

// Current position of scrolling
int scrollPosition = 0;

void setup() {
  // Initialize the LCD
  lcd.init();
```

```
// Turn on the backlight
lcd.backlight();

// Clear the LCD at the start
lcd.clear();

messageLength = strlen(message);

// Initialize the button pin as input
pinMode(buttonPin, INPUT_PULLUP);
}

void loop() {
    // Read the current state of the button
    int buttonState = digitalRead(buttonPin);

    // Check if the button is pressed
    if (buttonState == LOW) {
        static unsigned long lastScrollTime = 0;
        unsigned long currentMillis = millis();

        // Check if it's time to update the scroll position
        if (currentMillis - lastScrollTime >= scrollInterval) {
            lastScrollTime = currentMillis;
```

```
// Clear the display
lcd.clear();

// Display the scrolling message
for (int i = 0; i < 16; i++) {
    int charIndex = (scrollPosition + i) % messageLength;
    lcd.setCursor(i, 0);
    lcd.print(message[charIndex]);
}

// Increment the scroll position
scrollPosition = (scrollPosition + 1) % messageLength;
}

} else {
    // Keep the display blank when the button is not pressed
    lcd.clear();
}
}
```