

LCD Interfacing

➤ Learning Objective:

- ❖ To learn how to write a embedded C program for the 8051 microcontroller to control an LCD display using Keil uVision LDE and Proteus Simulation.
- ❖ To understand how to send commands and data to the LCD to display strings and numbers.

➤ Input and Output:

➤ Input:

- ❖ The program inputs a string and an integer value to be displayed on the LCD.

➤ Output:

- ❖ The output is the text displayed on the LCD, which is controlled by the microcontroller program.

➤ Logic:

- ❖ The program begins by initializing the LCD with a series of commands to set it up for display.
- ❖ A string "ES TRAINING" and "GITAM UNIVERSITY, BANGALORE" are written to the LCD.
- ❖ The program then clears the display and writes "CLASS STRENGTH" followed by the class strength (20 students).
- ❖ The number of students (MyData) is split into digits and displayed on the second line of the LCD.

➤ Results:

- ❖ The LCD displays "CLASS STRENGTH" and the number "20" followed by "Students", showing the class strength on the screen.

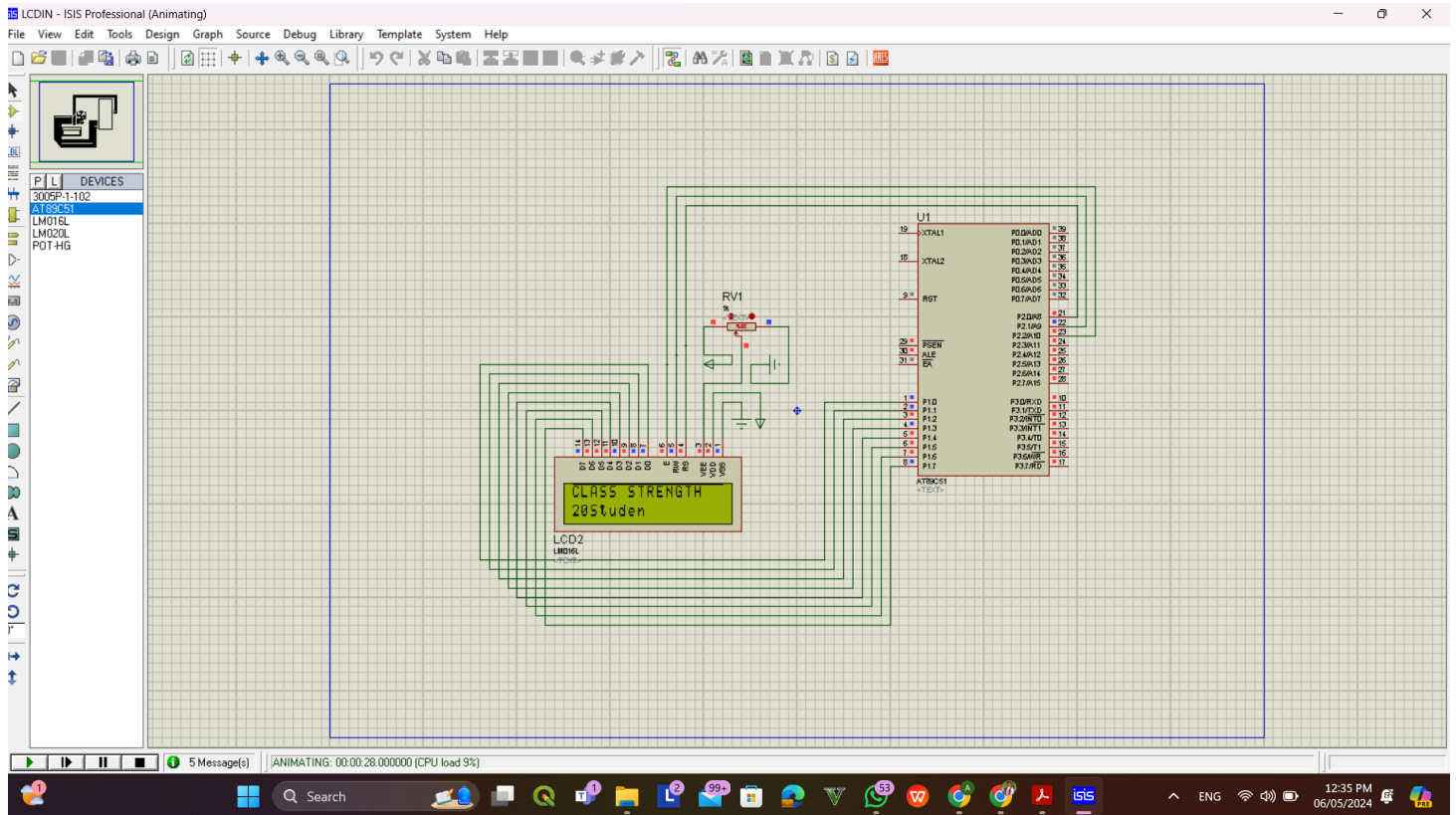
Embedded Systems Report

DAY 4

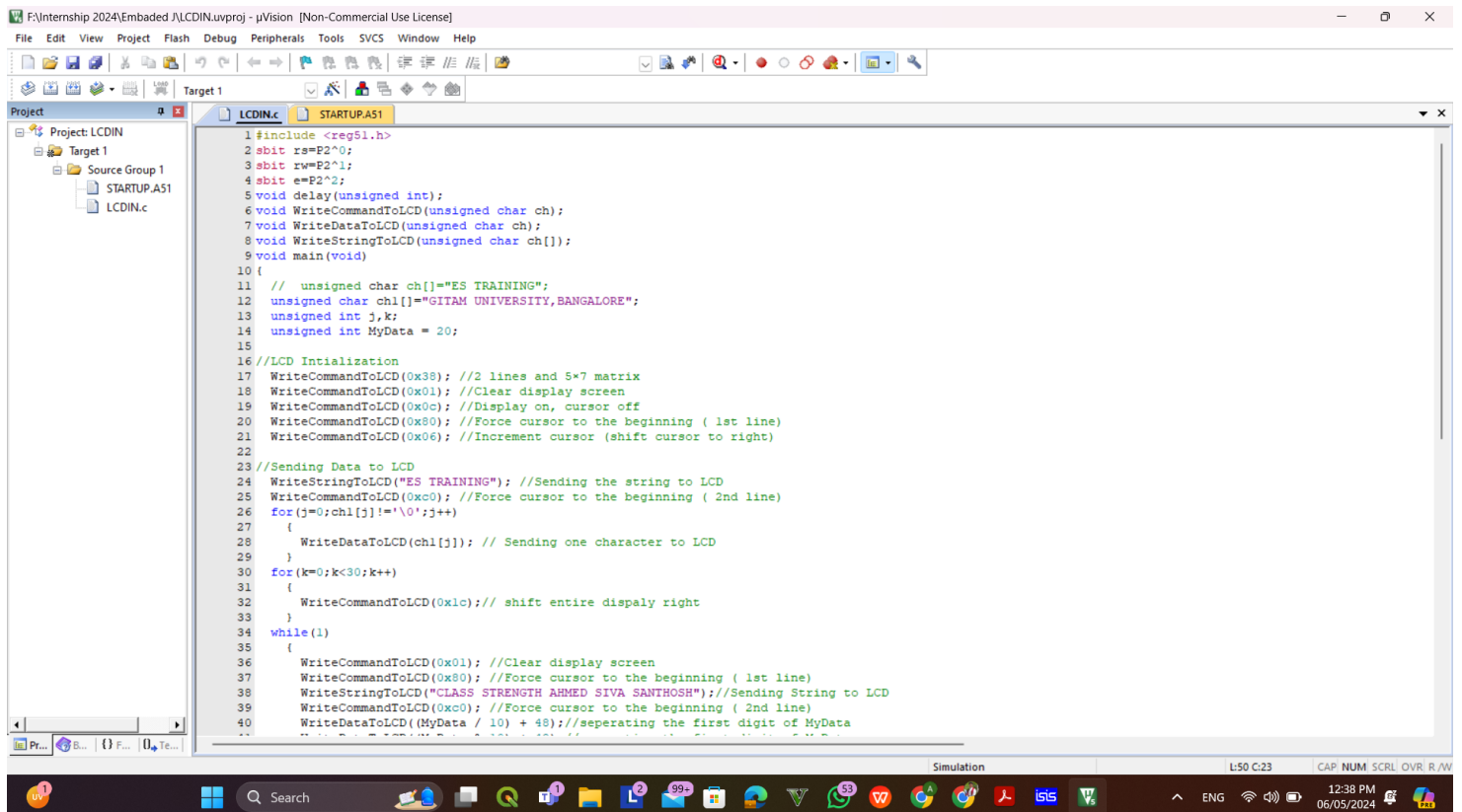
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Screenshots:



Proteus Simulation



Keil uVision