# MANIPAL INSTITUTE OF TECHNOLOGY

# EMBEDDED SYSTEMS FISAC-2

## TITLE: INTERFACING LCD, KEYPAD AND BUZZER FOR A TIMER

### SYNOPSIS

OBJECTIVE: The buzzer should sound an alarm when the timer reaches zero. This will alert users that the timer has completed.

BRIEF DESCRIPTION:

1. Display timer information: The LCD should display the current time elapsed, remaining time, or both. This will allow users to monitor the progress of the timer.
2. Allow user input: The keypad should allow users to input the desired timer duration. This input can be in seconds, minutes, or hours, depending on the desired granularity of the timer.
3. Sound an alarm: The buzzer should sound an alarm when the timer reaches zero. This will alert users that the timer has completed.
4. The program implements a down counter from the input the user is given. Once the counter reaches 00:00:00 the buzzer triggers a sound.
5. Down counter is implemented on the lcd display when the switch is toggled.

TEAM MEMBERS:

* P. MOUKTHIK (210905296)
* P.S.V AASHISH (210905212)
* G. SREE LAKSHMI NARASIMHA NAIDU (210905304)
* S. HEMANTH BHARATH (210905178)
* MAKA SATYA PRANAV GUPTA (210905302)