SLOG SOLUTIONS PRIVATE LIMITED
TECHNOLOGY: EMBEDDED SYSTEM
DURATION: MODULE 1 (4 WEEKS)
MODULE 1 + 2 (6 WEEKS)

MODULE 1:

INTRODUCTION OF EMBEDDED SYSTEM

- History and need of embedded system
- Basic components of embedded system
- Hardware classification of embedded system
- Advantage and disadvantage of programming language of embedded system.
- Difference between microprocessor and microcontroller
- Classification based on architecture and instruction set
- Types of microcontrollers
- Memory classification
- Description and pin diagram of ATMEGA16
- Description of RAM and CPU registers
- Functions of SFR

INTERFACING OF LED, SEVEN SEGMENT DISPLAY, LCD

- Introduction of LED's
- Interfacing circuit description of LED'S
- Programming of LED's interfacing
- Introduction to 7 segment display
- Types of 7 segment display
- Interfacing circuit description of 7 segment display

- Programming of 7 segment display
- Introduction of 16*2 LCD
- Commands and interfacing circuit description of 16*2 LCD
- Programming of 16*2 LCD

INTERFACING OF BUTTON, MOTORS, TIMER AND COUNTER PROGRAMMING

- Introduction to buttons
- Interfacing and programming using button
- Introduction of motors
- Types of motors used in embedded system
- Programming and controlling of motors
- Introduction of timer and counter
- Description and programming of timer and counter.

SERIAL COMMUNICATION

- Introduction to serial communication
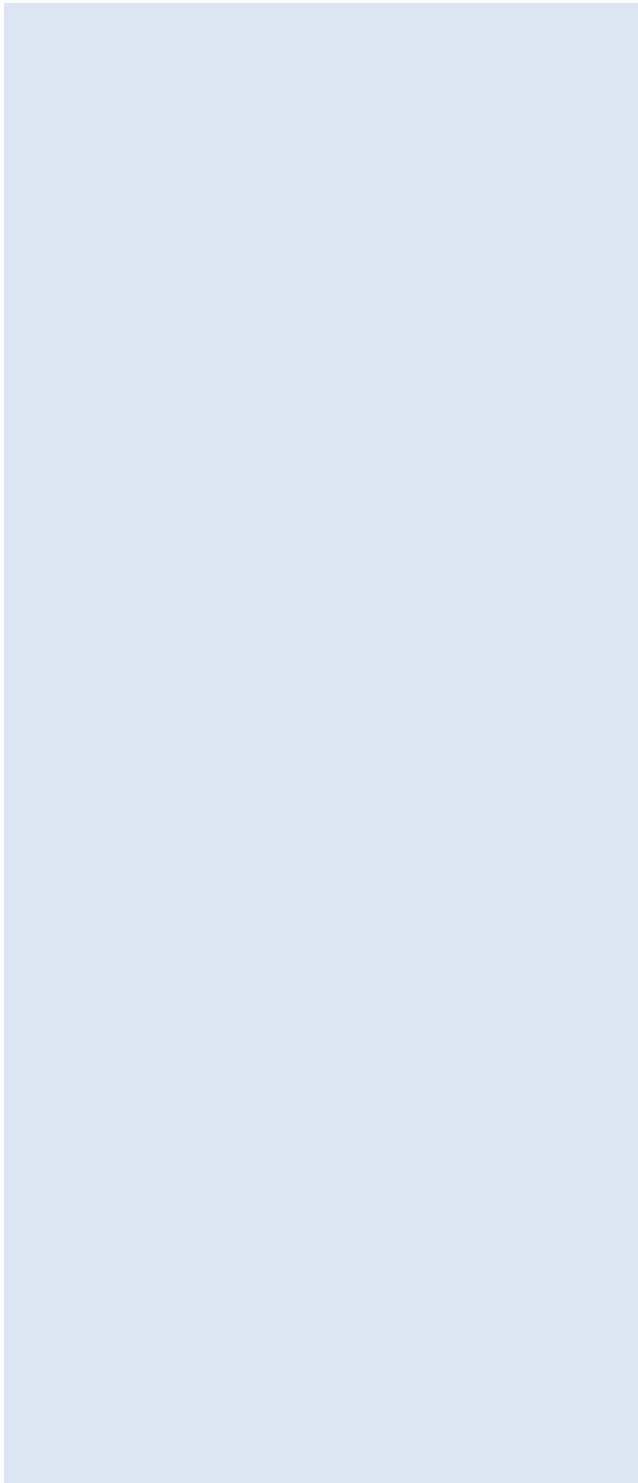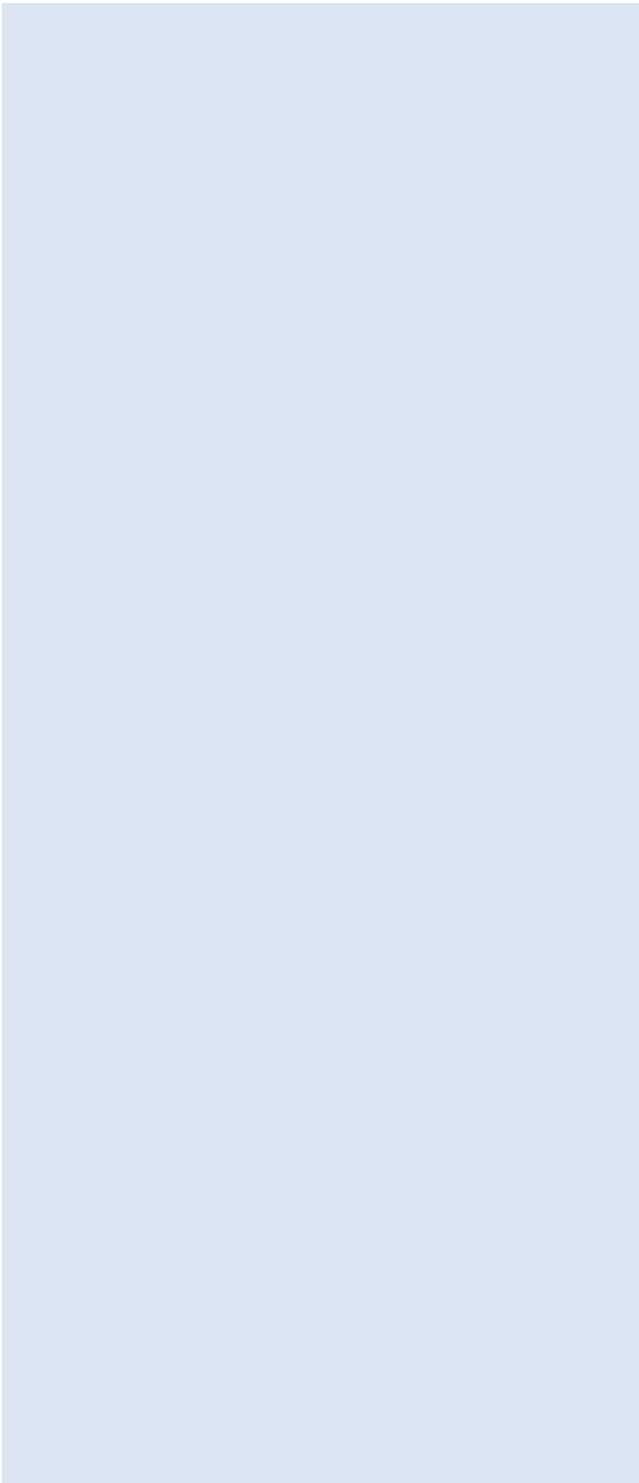- Interfacing and programming of USART

MODULE 2:

INTERRUPT DRIVEN PROGRAMMING

- Introduction to interrupts
- Types of interrupts
- Programming of interrupts

INTERFACING OF ADC AND EXTERNAL MEMORY

- Introduction to ADC

- Interfacing circuit of ADC
- Interfacing of temperature sensor (LM35)
- Introduction to external memory interfacing
- Introduction to i2c protocol

SLOG SOLUTIONS PVT.LTD.
HELPLINE 7456000240/7456000241
www.slogsolutions.com