

Shantilal Shah Engineering College, Bhavnagar
Department of Electronics and Communication
Microcontroller and Interfacing
 Subject Code: 2151001
 B.E. 5th Semester
 List of Experiment

Sr.No	Title
Arduino programs	
1	To understand Arduino open source hardware and programming environment and to write program to blink LED.
2	Interface Digital/Analog input output interfacing module with Arduino board and write programs related to I/O module.
3	Write and execute Arduino program to display message and numbers on LCD
4	Write and execute Arduino program to read analog value. Sense temperature using LM35 sensor and display temperature value on LCD.
5	Write assembly language programs for ATmega32 Micro-controller and simulate the same using ATMEL Studio.
AVR Programs	
6	To understand EasyAVR v7 development board and programming environment.
7	Write and execute a program to generate different tones on buzzer.
8	Write and execute a program to count up using Seven Segment display.
9	Write and execute a program to switch ON & OFF the LED using analog input (ADC Interface).
10	Write and execute a program to interface LCD with AVR development board.
11	Write and execute a program to display the data of EEPROM on LED.
12	Write and execute a program to display your name using serial communication (UART)

Interfacing Programs

13	Write and execute program to rotate DC motor with different speed using PWM.
14	Write and execute program to rotate stepper motor in clockwise and anticlockwise direction with half step and full step mode.
15	Write and execute program to rotate servo motor in clockwise and anticlockwise direction.
16	Write a program to sense motion using motion sensor.