

Microcontroller and IoT Lab Questions

1. Use Labels to calculate the sum of say 10 numbers.
2. Write an Assembly level program to copy multiple data at a time say 128 bytes of data in two iterations.
3. Write a program to illustrate ASR and LSL instruction.
4. Write a program to illustrate the processing of data in a stack and realizing of stack using another file say (processing x to read $2x+9$).
5. Write a program to clear and extract the bits with starting position P and width of the bits W.
6. Write a program to use switch case.
7. Write a C program to Light LEDs connected to port C12-15 using macros.
8. Write a C program to display 4 lines of Text on LCD.
9. Write a C program to enable External Interrupt pin to trigger interrupt on GPB15 and buzz.
10. Write a C program to take input from 3x3 keypad and output to LCD display.
11. Write a C program to count from 0 to 99 and display them on 7-segment LEDs.
12. Using putty make a remote connection to raspberry pi and write a python program to blink a LED