

AIM-

To design and implement an embedded system that interfaces an 8051 Microcontroller that display the name and roll no on the LCD screen.

Hardware Used - Computer System, 8051 Microcontroller kit, USB connectors.

Software Used - Keil Micro-vision IDE, Flash Magic tool.

Procedure -

1. Open Keil Micro-vision.
2. Create new project.
3. Setup all the required settings and create a C file for the source code.
4. Write the required source code in C.
5. Press F7 to build the code and generate the hex file.
6. After checking the code, we'll connect the USB cable to the Port.
7. We'll connect the Adapter to the 8051 microcontroller and power on the board.
8. Now, we'll launch Flash Magic.
9. We'll setup all the required settings.
10. After setting up everything in Flash Magic, we'll burn the hex code of the source code in the 8051 board.
11. Then, we'll power off the board and unplug the USB.
12. Now, power on the board

C Code

```
#include<LCD.h>

unsigned char x=2;

unsigned char y=0 ;

void main(void) {

LCD INIT();
```

```
while (1) {  
  
y=0;  
  
x=2;  
  
LCD_WRITE("Bushra",y,x);  
  
DELAY (600);  
  
x=7;  
  
LCD_WRITE ("Ramsha",y,x);  
  
DELAY (600);  
  
y=1;  
  
x=2;  
  
LCD_WRITE("Rumman",y,x);  
  
DELAY (600);  
  
x=9; LCD_WRITE("46, 66, 67",y,x);  
  
DELAY (1000);  
  
}  
  
}
```

Result

The C program successfully implements an embedded system that interfaces an 8051 Micro-controller to display name and roll number on LCD screen.

Output

