

```

#define F_CPU 4000000

#include<avr/io.h>
#include<util/delay.h>
#include<avr/interrupt.h>
#include "lcd_lib.h"
#include<string.h>

#define USART_BAUDRATE 9600
#define BAUD_PRESCALE (((F_CPU / (USART_BAUDRATE * 16UL))) - 1)

void LCDinit(void);
void usart_init();

int i=0;
unsigned char value[20];

int main(void)
{
    cli();
    LCDinit();           // initialization of LCD
    LCDclr();
    _delay_ms(50);       // delay of 50 mili seconds
    LCDGotoXY(0,0);
    LCDdisplay("Unique ID");
    usart_init();         // initialization of USART
    sei();
    LCDGotoXY(0,0);

    while(1)
    {

    }
    return 0;
}

void usart_init()
{
    UCSRB |= (1 << RXEN) | (1 << TXEN) | (1 << RXCIE); // Turn on the
transmission and reception circuitry and the receiever enable
    USRC |= (1 << URSEL) | (1 << USBS) | (1 << UCSZ0) | (1 << UCSZ1);
// Use 8-
bit character sizes

    UBRRL = BAUD_PRESCALE; // Load lower 8-bits of the baud rate value
into the low byte of the UBRR register

    UBRRH = (BAUD_PRESCALE >> 8); // Load upper 8-bits of the baud rate
value..
// into the
high byte of the UBRR register
}

ISR(USART_RXC_vect)
{

```

```
unsigned char c=UDR;
value[i++] = c;
if(i==4)
{
    LCDclr();
    LCDdisplay(value);
    _delay_ms(1000);
}

reti();
}
```