USART programming using software polling

Part I

The objective of this lab is to establish an USART0 transmission between the AVR and an external serial port. The AVR shall transmit a string, e.g. “The AVR-UART is fine!\n” periodically. No interrupt services are used for this basic test.

At the end of your code, there is the definition of function “SCI_Init()” used to initialize the device.

Set the device to the following configuration (assuming fosc = 8 MHz):

- 2 stop bit, even parity, 7 bits per character, 19200 bps (see UCSR0C register/baud register)

Implement these functionalities:

- Send continuously the string, character by character, by software polling of the UDRE bit in UCSR0A register.
- Include a software loop before the start of the next transmission sequence of approximately 2 seconds.

```
#include <avr\io.h>              // Most basic include files

// Define here the global static variables
//

char message[]={"The AVR-UART is fine !\n"};


// It is recommended to use this coding style to
// follow better the mixed C-assembly code in the
// Program Memory window
//
void SCI_Init(void) {




}

// ********************************************************
// Main program
//
int main(void) {


      SCI_Init();
      while(1)
      {




      };

}
```