Lab 2 UART Driver

Name: Chase Lewis
Date Performed: September 3rd, 2021
Course: Interface and Digital Electronics
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                Lucas Burnette
                Charles Poliwoda
Instructor's Name: Louis Beato

Description

This laboratory furthered the understanding of working with ports, the ports needing to be enabled and the Port Select register being configured to the proper mode along with the introduction to serial transmission. The purpose of this exercise is to explore the initialization of the UART interface, writing a character and reading a character. Due to the UART0 module being only available to a specific mode, the Port Select register must be properly configured and certain ports need to be discovered based on what's available for serial transmission.
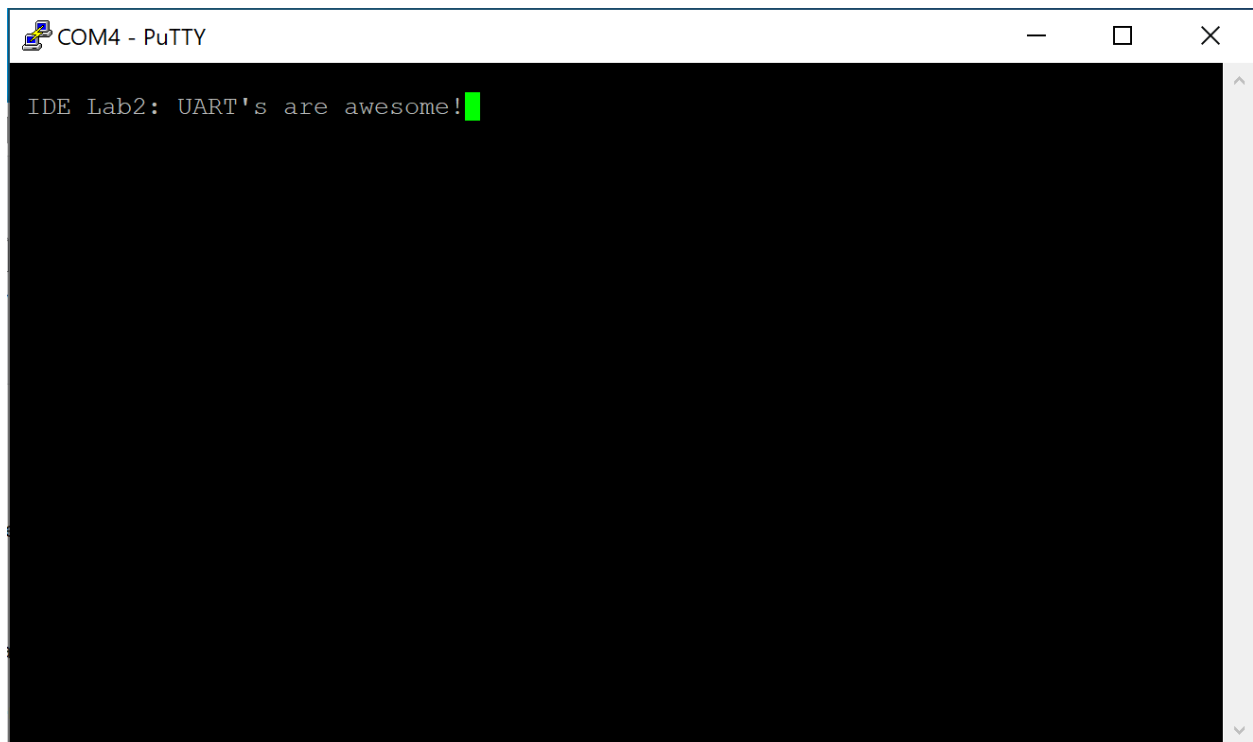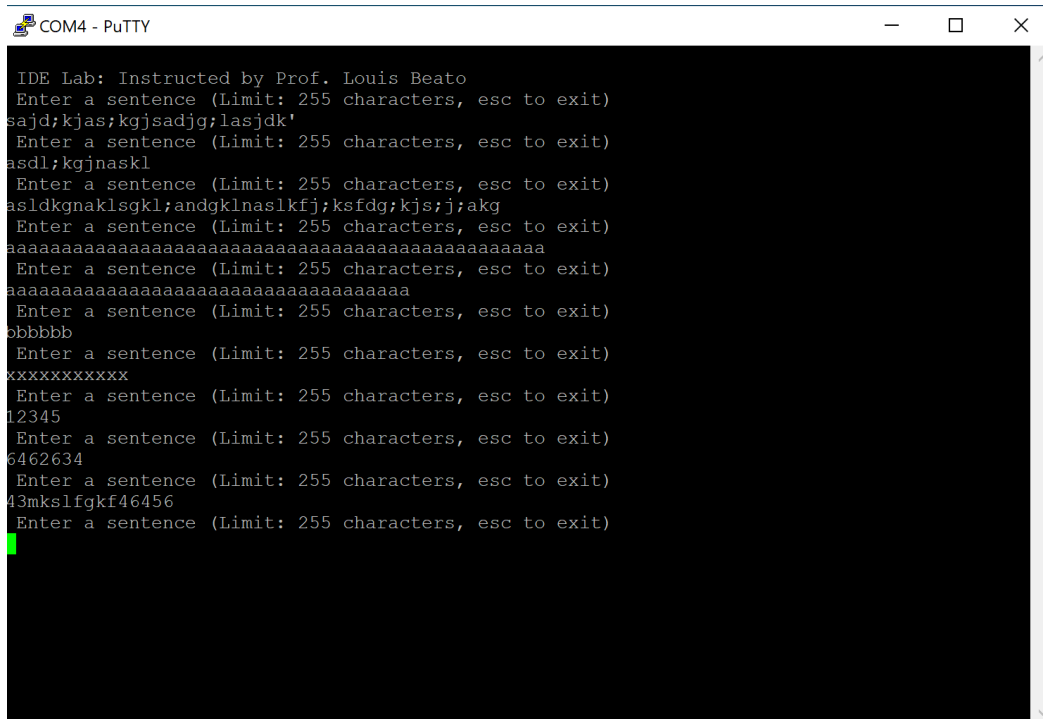

Figure 1.1: UART Function Implementation

```
COM4 - PuTTY                                                    —   □   ×

 IDE Lab: Instructed by Prof. Louis Beato
 Enter a sentence (Limit: 255 characters, esc to exit)
sajd;kjas;kgjsadjg;lasjdk'
 Enter a sentence (Limit: 255 characters, esc to exit)
asdl;kgjnaskl
 Enter a sentence (Limit: 255 characters, esc to exit)
asldkgnaklsgkl;andgklnaslkfj;ksfdg;kjs;j;akg
 Enter a sentence (Limit: 255 characters, esc to exit)
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
 Enter a sentence (Limit: 255 characters, esc to exit)
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
 Enter a sentence (Limit: 255 characters, esc to exit)
bbbbbb
 Enter a sentence (Limit: 255 characters, esc to exit)
xxxxxxxxxxx
 Enter a sentence (Limit: 255 characters, esc to exit)
12345
 Enter a sentence (Limit: 255 characters, esc to exit)
6462634
 Enter a sentence (Limit: 255 characters, esc to exit)
43mkslfgkf46456
 Enter a sentence (Limit: 255 characters, esc to exit)
```

Figure 1.2: UART Echo Program

Exercise 2: UART Driver

Student's Name: Chase Lewis   Section:_____

Pre-lab		Point Value	Points Earned	Comments
Pre-lab	UART Ports, Pins, and Name	10	10	LJB 9/3/21
	SEL Register	10	10	LJB 9/3/21

Demo		Point Value	Points Earned	Date
Demo	Part 2	15	15	XB 9/3
	Part 3	20		

To receive any grading credit students must earn points for both the demonstration and the report.

Exercise 2: UART Driver

Student's Name: Chase Lewis   Section:_____

Pre-lab		Point Value	Points Earned	Comments
Pre-lab	UART Ports, Pins, and Name	10		
	SEL Register	10		

Demo		Point Value	Points Earned	Date
Demo	Part 2	15		
	Part 3	20	20	LJB 9/7/21

To receive any grading credit students must earn points for both the demonstration and the report.