

LAB 8

BUBBLE SORT

1. INTRODUCTION

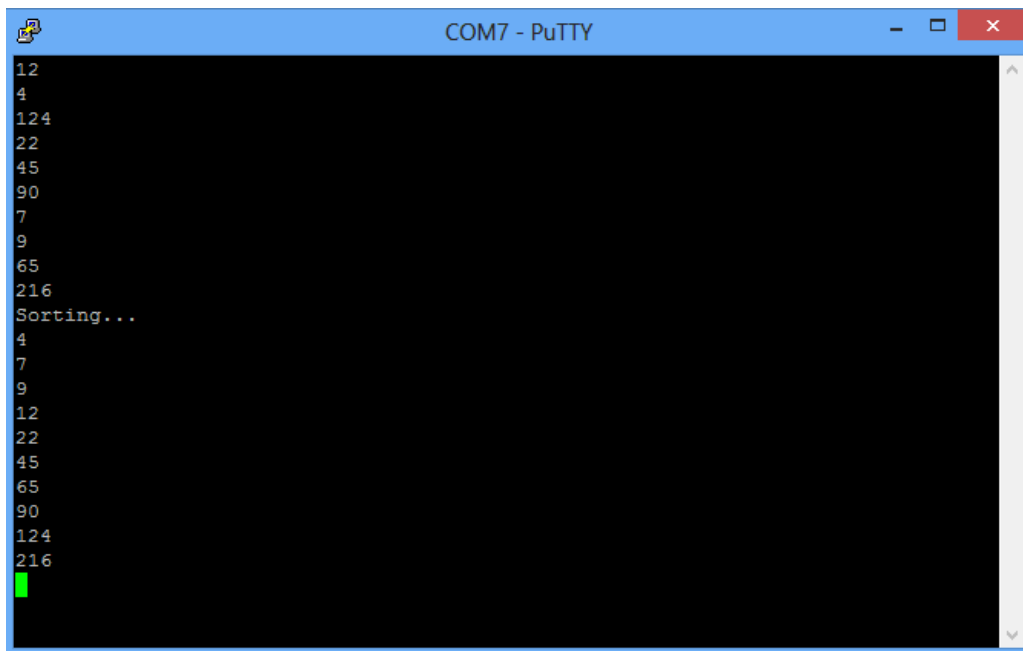
This lab is about the application of serial communication. You will implement the bubble sort algorithm on CSM12C32. You can search bubble sort algorithm on the internet. Here is a few places to start:

http://en.wikipedia.org/wiki/Bubble_sort

<http://www.youtube.com/watch?v=lyZQPjUT5B4>

2. EXPERIMENT

Your program will receive numbers via Putty. Numbers should be between 0-255. Each number will be typed on Putty. When you press enter, the number will be saved into an array on the microcontroller. After 10th number is entered, microcontroller will sort the numbers. Then it will print these ten numbers in ascending order on Putty. You can use lab7 codes to send and receive character from Putty. (Hint: Do not forget *ascii* conversion. When you type 2, microcontroller receives 0x32. If 203 is typed, microcontroller receives 0x32, 0x30 and 0x33. Your Putty window should look like the following figure.)



```
COM7 - PuTTY
12
4
124
22
45
90
7
9
65
216
Sorting...
4
7
9
12
22
45
65
90
124
216
```

In the report, explain each step of your codes.
