Lab 3: Accessing Data from Memory Locations

1 Problem Statement

In this lab, we will write assembly language programs to:

1. Move a block of data stored in ten consecutive memory locations to another ten consecutive memory locations.

   (a) Store ten 8-bit numbers in consecutive locations starting from 7501H
   (b) Move this block of data with the result in memory location 7601H.

2. Arrange the block of data in the above memory locations in ascending order

   (a) Store ten 8-bit numbers in consecutive locations starting from 7501H
   (b) Sort this data in ascending order starting from the memory location 7501H

2 Procedure

You may use the following logic to perform the above operations

2.1 Sequence of steps for moving block of data
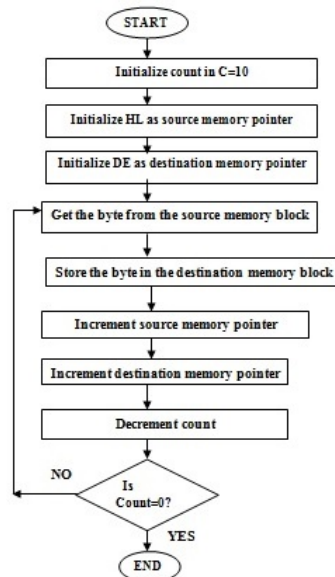
Flowchart:

Figure 1: Flowchart for moving block of data

2.2 Sequence of steps for arranging the block of data in ascending order
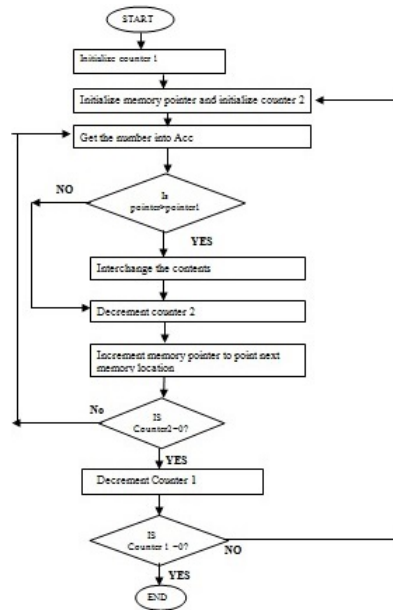
Flowchart:

Figure 2: Flowchart for arranging the block of data in ascending order