*Write pseudo-code or MATLAB code to solve the following problems. Do NOT use any built-in functions.*

Group #:

Name:

**EXERCISE 1:**  Assume you have two variables X and Y, which each hold a single number. Assign the smallest of the two numbers to the variable SML.

**EXERCISE 2:**  Modify your code, so that SML contains a NaN if the values X and Y are the same.

**EXERCISE 3:**  Modify your code to put the smallest of the numbers in a 3-element vector X=[a b c] into the variable SML.

**EXERCISE 4:**  Longitudes “wrap around” the earth, so that any longitude may be given as a positive value between 0 and 360 degrees (going eastward), or a negative value between 0 and -360 degrees (going westward). The location of the “0” degree line is the same in both cases. But this means that a longitude of 355 and a longitude of -5 refer to the same place!

Given two arbitrary values LON1 and LON2 in the range -360 to +360, write a selection that decides whether these two values refer to the same point. Create a variable same that has a value of 1 if they refer to the same point and a value 0 if they refer to different points. Does it work? - Test your code with pairs of numbers like (5,5), (5,-355), (5,355),(-5,355),(0,0),(360,360),(0,360), etc.