CSC 520 Computer Architecture

Lab: An Overflow Detector

Due on April 24, 2019, 6:30 pm

This project is to write a program that determines whether or not a two’s complement addition overflows.

1. Your program named “mydetector” must accept command-line arguments

   ➢ ./mydetector  x  y

   If it is run with the wrong arguments or no arguments, it should print out the usage instructions and exit.

2. The format of the output

   ➢ No overflow: Two’s complement of addition (Decimal number)
   ➢ Overflow: Two’s complement of addition (Decimal number)

Programming Language and Environment:

• Language: C
• Platform: MCT263 machines
• Shell: tcsh

Submission:

Make the followings on each of them with student, course, and instructor information as s19csc52014_lastname.tar.gz and then submit to ship.drlee@gmail.com. The subject of your email is s19csc520 14 lastname. You need to submit the hardcopy of your documentation on April 24, 2019, in class.

• makefile
• readme
• all source code
• any extra files needed to run your detector program
• documentation
  - description of the program
  - algorithm
  - analysis of your algorithm and output