

CSE220: SYSTEMS FUNDAMENTALS I

Assignment 6 Due on 22 Nov, by 5PM

Write the code for each problem separately but hand the code for all the problems in a single plain-text file. Test results should be included immediately after the code for each problem.

You are advised to first develop your algorithms carefully.

1. Write a MIPS assembly-language program that program that does the following.
 - (a) Reads an integer N.
 - (b) Reads N integers, one at a time.
 - (c) Computes the sum of the positive integers and the sum of the negative integers.
 - (d) Prints the results.

Your program should work correctly regardless of the ordering on the input numbers.

2. Write a MIPS assembly-language program that does the following.
 - (a) Reads two integers, a dividend and divisor.
 - (b) Divides the two using only repeated subtraction.
 - (c) Prints the quotient and remainder from the division.

Your program should work correctly regardless of the signs of the two operands.

3. Write a MIPS assembly-language program that reads an integer N and prints an asterisk-pyramid of N lines. For example, if N is 4, then the output should be

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