

## 1st Midterm Makeup Test

\_\_\_\_\_ **Student Name**

This is a take-home makeup test. You can earn back lost points up to a score of 8/10 for one or more problems by doing the following things.

- (a) Write your name in ink in the blank above.
- (b) Go to the CS lab in GCB 101 during tutoring hours.
- (c) Log into a linux computer in that room.
- (d) Write the program that was required for the exam. Include a comment identifying you as the author.
- (e) Use `#!/usr/bin/perl` and `chmod 755` to make the program executable.
- (f) Test it from the command line and make sure it works.
- (g) Show your work to the tutor.
- (h) Get the tutor's signature and date.
- (i) Turn in to Bro Colton on or before May 19: the signature sheet, your original test, and printouts of the programs you wrote.

### Tutor Instructions

Verify that the student's name is written in the blank above in ink. Verify that the student followed the instructions above and the program works. Then sign in the line for that program and write the current date.

### 1 Increment

Prompt for and read in one number. Add five to it and print the result.

Tutor: \_\_\_\_\_ Date: \_\_\_\_\_

### 2 Compare

Prompt for and read in two numbers. Tell whether the first is larger, the second is larger, or they are the same.

Tutor: \_\_\_\_\_ Date: \_\_\_\_\_

### 3 1 to N

Prompt for and read a number N. Print the numbers from 1 to N (inclusive). You can assume N is an integer and is greater than 1. Example: input 6, output 1 2 3 4 5 6. Don't worry about spacing, commas, or newlines.

Tutor: \_\_\_\_\_ Date: \_\_\_\_\_

### 4 Total, Average, Max, Min

Read lines from STDIN until you get a blank line. On each line is a number (e.g., 13 or 98.6). There will be at least one number. Report (a) how many numbers were read, (b) what is their total, (c) what is their average, (d) what is the largest (maximum) number, (e) what is the smallest (minimum) number. Do not use any kind of array. Use a small, constant amount of storage.

Tutor: \_\_\_\_\_ Date: \_\_\_\_\_

### 5 Maximum

Create a perl subroutine named "max" that takes as input an array of numbers and returns the largest number. Example: `max(1, -5, 3, 4, 2)`; returns 4.

To complete this assignment, you must also provide a program that uses the subroutine.

Tutor: \_\_\_\_\_ Date: \_\_\_\_\_