

2nd Midterm Makeup Test

_____ Student Name

This is a take-home makeup test. You can earn back lost points up to a score of 6/10 for one or more problems, and 30/40 overall, 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. Log into a linux computer in that room. Write the program that was required for the exam. Include a comment identifying you as the author.
- (c) Use `#!/usr/bin/perl` and `chmod 755` to make the program executable. Test it from the command line and make sure it works.
- (d) Show your work to the tutor. Get the tutor's signature and date.

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.

- (e) Turn in the signature sheet to Bro Colton on or before May 30.

1 Starline

Prompt for and read in one number. Use a loop to print that many stars ("*") on one line.

Tutor: _____ Date: _____

2 Odd Total, Even Total

Read lines from STDIN until you get a blank line. On each line is a whole number (e.g., 13 or 98). Add all the odd numbers and even numbers separately. (Even means divisible by two, such as 2, 4, 6, 8, and so on.) Report (a) how many numbers were read, (b) what is the odd total, (c)

what is the even total. Do not use any kind of array. Use a small, constant amount of storage.

Tutor: _____ Date: _____

3 Lucky 3

Ask for two numbers, A and B. Print the numbers from A to B, smallest to largest, but print stars around any number that has a "3" in it. Example: A is 15. B is 10. Print 10, 11, 12, *13*, 14, 15. (Assume the numbers are integers. Don't worry about spacing, commas, or newlines.)

Tutor: _____ Date: _____

4 Dice

Use something like `$x=int(rand(6))+1` to "roll" two six-sided dice by generating two random integers between 1 and 6. Announce the result, e.g.: "You rolled 5 and 3." Repeat the roll/print process ten times.

Tutor: _____ Date: _____

5 CGI: Which is Less

Write a perl CGI program that displays two blanks and invites the user to type in a number into each blank. When the user submits the form, the same CGI program should run, compare the two numbers, tell which one is smaller (say "\$little is less than \$big" or "the numbers are the same"), and display two empty blanks as before. Do not "use CGI;"

Tutor: _____ Date: _____