CS1428 Lab 5h MIDTERM REVIEW AND FUN

# Name: Section:

1. (5pts) What are the four main parts of a C++ program?
2. (5pts) Name the 5 data types we have covered so far this semester.
3. **(**5pts) Name the 4 logical operators.
4. (15pts) Write an if statement that determines if a number given to you, **grade**, is odd or even.
5. (10 pts)Write the following Linux commands to perform the given tasks
   1. List files in a directory
   2. Change Directories
   3. Go back 1 directory
   4. Create a directory
   5. Open a new .cpp file called linux.cpp
6. (20pts) Debug the following code. There are 3 syntax errors, 2 things missing, and 2 logic errors.

#include <iostream>

int main()

{

const double WEIGHT;

WEIGHT = .3;

cout << "Enter in three grades to average "<<endl;

int grades[3];

for(int x = 0; x<=3; x++)

cin >> grades[x];

int total = 0;

for(int x =0; x<3; x++);

{

total += grades[x];

}

double average = grades/3;

if(average > 69.4)

cout << "grade is " << average << endl;

cout << "you passed!"<<endl;

else

cout<<"You failid :(";

}

1. (20pts) Write a loop that prompts the user for a number,**num,** and prints out the sum of every number from 0 to **num**.
2. (20 pts) Go to Homework Upload and download last week’s program. This week you will be given 2 simpleprograms to translate into instructions for your simulated computer. There are possibly many ways to do these programs I will not only be grading you on success of the program, but on efficiency and logic of the program. (Don’t do something in 3 steps that you can do in one, **also know when you need a constant (instruction 7) and when the user needs to input something (instruction 5))**

**DO NOT PANIC! WORK TOGETHER!**

* 1. Write a program for you “computer” that calculates the tip that you would owe on a meal. You will need to read in the price of the meal and the amount of tip you want to leave (**Integers ONLY**) and the program should print out the tip that you owe in dollars. Our “computer” is dumb and can’t handle decimals, so truncation is perfectly acceptable here.
  2. Write a program for your “computer” that takes in the values of exactly and only 3 daily grades and exactly and only 2 test grades, weights them accordingly (Daily worth 40%, Tests worth 60%) and prints out the average. Our “computer” is dumb and can’t handle decimals, so truncation is perfectly acceptable here. **First try to figure out how to find an average with percentages without being able to use decimals.**