CS1428 Lab 2

## Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ NetID: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Write your name at the top of this sheet. Turn in this sheet along with all requested printouts before the end of class.**

1. (10 pts) Write an assignment statement that performs the following operations; declare any variables that are needed (Make sure the data type is correct; do not forget the semicolon).

a) Store the value 512 into a variable named ***highscore.***  
  
  
  
b) Declare **bonus**, multiply ***highscore*** by 14.27 and store the result in ***bonus.***   
  
  
  
c) Store the value ‘\*’ into a variable named ***mine.***

2. (10 pts) Evaluate the following expressions ***exactly as the computer would evaluate them***.  
  
**Do *NOT* use the computer to evaluate these expressions:**   
a) 27 / 2 - 4   
  
  
  
b) 6.4 \* 3   
  
  
  
c) 6.0 / 4

d) 14 / (11 / 4)

1. (10 pts) Consider the following C++ code snippet:   
     
    int cars = 10;   
    int trucks = 2;   
    int buses = 1;   
    int vans = 5;   
    int count = 2;   
     
    cars += count;  
    trucks += trucks + buses;   
    buses += 3;   
    ++buses;   
    vans = vans / count;   
     
   After execution, what are the values stored in:

a) cars?   
  
  
  
b) trucks?   
  
  
  
c) buses?   
  
  
  
d) vans?

1. (10 pts) Describe the difference between the ‘=’ and ‘==’ operators.

**Go to (cs.txstate.edu/~jaredp) and click on cs1428. Click the Lab02 link to download this week’s .cpp file. Open Eclipse and copy over your old source file with the new one. Make sure you put your name in the comments section at the top of the file.**

1. (60 pts) In your minesweeper project, declare 3 strings called name0, name1 and name2. You will also declare 3 int variables named time0, time1 and time2. You will take the numeric value stored in choice and use 2 simple if statements to either display the game board or display the high scores.

For example if the user selects option one:

Sample output:

This is my Minesweeper game.

Choose one of the options below:

(1) Start Game

(2) View Best Times

(3) Quit

Enter Selection: 1

012345678

0:#########

1:#########

2:#########

3:#########

4:#########

5:#########

6:#########

7:#########

8:#########

Mines left: 10

**Notice that this program does not output “You have selected option.” Make sure you delete this command.**

If the user selects option 2, you will read the names and top scores from “besttimes.txt” and store them in your variables (time0, name0, etc.). Then you will print the top scorers like below:

This is my Minesweeper game.

Choose one of the options below:

(1) Start Game

(2) View Best Times

(3) Quit

Enter Selection: 2

!!Top Minesweepers!!

aaa 999s

aaa 999s

aaa 999s

When you are done, make sure to save, rename the lab **minesweeper2.cpp**, print and upload this week’s lab.