Homework 1

C++ - Foundations

University of Washington

Extension Program

Name_____

1. Write a C++ program that declares a variable for month, day, and year. Assign 7 to the month, 26 to the day, and 1973 to the year. Then display the variables like this:

7/26/1973

2. Write a program to print the largest and smallest values of its input. That is, your user is prompted to enter a value until the user gets bored. At that point, print out the largest and smallest values entered. The program should behave reasonably even when there are no input values.

You may use the following code fragment to incorporate looping behaviour.

```
while ((aVar = cin.get()) != 'x')
{
    // your code in this here place
    // what does the next line do?????
    cin.get();
}
```

- 3. Write a program that asks for a length and width of a rectangle and displays both its area and its perimeter. (Hint: Use * for multiplication and + for adding int variables.).
- 4. Write a simple main program to compute the price of 25 gallons of gas at \$1.29 per gallon with a 3% discount and an 8.6% sales tax.
- 5. Write a C++ program to compute the list price of a car when you know the actual cost is \$15,500, the sales tax is 8.6%, and the discount is 12%.

6. Write a program to print your net income after taxes. Let's assume your gross salary is \$78,000, you have to pay 10.3% in social security on the first \$65,000 of income, your federal tax is \$3,500 plus 28% of all income over \$30,000 and that your state tax is 9.3% of your gross.