Programming Assessment 1
AP Computer Science

Due date: Thursday, October 23rd, by 11:59pm || Value: 35 points

Complete a project that uses the following:

- Main/Driver class
- Methods
- Scanner for user input
- Arrays
- Loops
- If statements / logic
- (Custom classes should be used when appropriate)

Your program may do anything that you want it to do. Having said that, some ideas might be for an original card game or dice game, a choose your own adventure game, language conversion (like Pig Latin, for example), a fortune teller, encryption/decryption of messages, madlibs, etc.

A lot of ideas can be found here:
http://rosettacode.org/wiki/Category:Programming_Tasks

Please use good judgment to rule out programming projects that are too simple.

Proposal (5 points)

You must write a project proposal. This should include:

- an overview of what your program will do
- pseudo-code that will outline your classes and the flow of your program
- a list of tasks you will need to complete that you think will be the most challenging for you (common challenges among students can perhaps be covered in class)

Program (30 points)

The grading of the program will be broken down as follows:

- your program compiles (10 points)
- documentation, comments, and cited sources (3 points)
- DRY coding practices (don't repeat yourself) (2 points)
- code modularity (2 points)
- use of scanner (2 points)
- use of logic/if-statements (2 points)
- use of loops (2 points)
- use of arrays (2 points)
The remaining 5 points will be flex-points, and will be awarded for excellent coding practices, creativity, and experimentation. Points can also be withheld for bad coding practices, logic errors, and overly simple projects.

**Working Together**

Every student must complete their own project for this assessment. You may not share your code with other people; you may, however, talk to each other about what you are working on and share general ideas and approaches.

If you converse with someone about your project, please note in your code who you spoke to and what they helped you with.

**Online Resources**

You may of course look up information online. Should you find a code snippet that you want to use, you should thoroughly comment what is happening in the code to prove your understanding. You should also always cite your sources in comments in your code.