WKU HIGH SCHOOL PROGRAMMING CONTEST RULES

Programming Languages

The contest will support the following programming languages and environments on PC's running Windows XP: QBASIC, GWBASIC, Visual Basic 6.0, Visual C++ 6.0, and Java 2 SDK (using the JGrasp, JCreator, Eclipse editor). Teams may program in any or all of these languages. The request for language information on the registration form is to help us assign teams to labs.

With the exception of Visual Basic, all programs are expected to be written as console applications with all code residing in a single file. Visual Basic programs will be expected to follow the form of the console applications as much as possible. This includes labels for the prompts, input text boxes for user input, a Submit button to cause the required calculations to be performed, and a labeled text area showing the results. Since Visual Basic programs are stored in multiple files, those programming in this language will also be required to zip the form and project files together into a single archive file for submission. Details of how this is to be done will be made available and demonstrated during the initiation and practice session.

Submission Guidelines

Submissions are made by directing the source file to the networked printer (timestamp) and providing a disk copy for the judges. Detailed submission procedures will be made available and demonstrated during the initiation and practice session.

A submission is judged by running it on some test data (in addition to the sample data given in the problem). If the submission gives the correct answers for all test cases, the submission is judged solved and the team will be so informed. If the submission does not give the correct answer for all test cases, the submission is judged incorrect and an error message is returned to the team. The error messages and their meaning are as follows:

Incorrect Format:  The output is not in the form specified
Compilation Error:  The program failed to execute due to syntax errors
Run-time error:  The program crashed or entered an infinite loop, possibly producing one or more correct or incorrect answers before doing so
Wrong answer:  The program produced an incorrect answer for one or more of the judges' test cases

Multiple submissions may be made for each problem until the problem is judged solved or the contest ends, whichever comes first.
Scoring

The team solving the most problems is the winner. In case of ties, a tie-breaking point system will be used. The point system is based on elapsed time and number of submissions. Lower point totals are better (when comparing teams solving the same number of problems).

Each problem submission adds 20 points to a team's score (regardless of whether the solution is judged correct or incorrect). In addition, one point for each elapsed minute is added to the score when a correct solution is submitted.

Example: Team A completes Problem 1 30 minutes into the contest. They then complete Problem 2 90 minutes into the contest. On Problem 3, they have one incorrect submission, but submit correctly 120 minutes into the contest. Team A fails to solve any other problems, but does submit an incorrect solution to Problem 4. Team A's score is computed as follows:

Problem 1

20 1 submission
+30 30 elapsed minutes
50 Problem 1 total points

Problem 2

20 1 submission
+90 90 elapsed minutes
110 Problem 2 total points

Problem 3

40 2 submissions
+120 120 elapsed minutes
160 Problem 3 total points

Problem 4

20 1 submission and Problem 4 total points

Contest total points = 50 + 110 + 160 + 20 = 340
Other rules

Each team will have one computer assigned to them in a lab.

All five problems will be handed out at the beginning of the contest.

**Teams may bring up to two computer or language reference books.** Electronic media is not allowed. Program listings are not allowed (with the exception of those in the books). Teams may also bring non-programmable calculators. Scratch paper will be provided, but teams will need to bring pens and/or pencils.

Any team finishing all the problems must leave the programming contest area.

Any conduct deemed unsportsman-like, improper, or disruptive by any judge or room monitor will be referred to the contest coordinator, and the involved teams may be disqualified from the contest. *In particular, teams found playing computer games and/or surfing the Web will be asked to leave the contest.*

Teams may not converse with anyone outside of their own team and the programming contest judges, room monitors, and officials. Teams may not converse with their coach. Teams may not use the internet.

(Rules adapted from the Evansville programming contest.)