

Source Code - Java Programming

Trail Event – WOSO 2017

1. Description:

This event combines computer science and mathematics to solve problems. The objective is to answer related to computer concepts, logic and mathematical problem solving using computers.

Team Size: Up to 2

Impound: None

Eye Protection: None

Approximate Time: 30 mins

2. Event Parameters:

1. Each team will be given a written test with 30-60 questions and a scantron to answer the questions.
2. Teams will be allowed to bring one 3" x 5" index card (both sides) of notes.
3. The programming language will be used is Java.
4. Test may be conducted as station based.

3. The Competition:

1. *Basic Syntax and Concepts:* Students should know basic syntax of Java programming language, computer programming concepts and mathematical concepts.
2. *Java programming concepts:* Data Types, Arithmetic operations, Control flow/Logic, Data Structures, Object-oriented programming, Collections, I/O processing and Exception Handling.
3. *Mathematical topics:* Order of operations, Powers, Factorials, Statistics, Areas and Volumes of shapes, Prime Numbers, Fibonacci Numbers and other mathematical concepts
4. *Computer Hardware & Software Concepts:* Basics of computer hardware and architecture, Programming basics, Hardware & Software Terminology

4. Scoring:

1. High score wins

5. Tie-Breaking:

1. Tie-breaking questions will be used as 1st tie-breaker.
2. Time to finish the test will be used as 2nd tie-breaker.