

Python

Contest Overview and Components

Teams will be given the problem statement at the beginning of the contest time. Time will be allowed to read the problem statement and ask any questions in a common session. Once the question & answer time has closed, no further questions will be answered. At the end of the contest period, each team will be asked to submit their solution for judging.

The Python Competition Problem Statement will test for a range of skills without going into too much detail for any one skill in particular. A list of tools and skills are available below to help teams prepare for what may be on the problem statement.

The use of references, such as Python API's, are allowed for the competition.

Teams are expected to have the necessary tools preloaded on their machines prior to the competition.

Team Composition

Your team may be made up of 1-2 students.

Skills

Python programming, Object-Oriented Programming, module creation and use, refactoring, ability to properly document code with docstrings, JSON, REST API familiarity. The following is a more specific list:

- Decision Structures and Boolean Logic
- Repetition Structures
- String Handling
- Exception handling
- Code Documentation
- Web knowledge/REST familiarity
- Functions
- Files for both Input and Output Use
- Exception Handling
- Lists and Tuples
- Dictionaries and Sets
- Object Oriented Principles (ex. encapsulation, inheritance, polymorphism)
- Creation of Classes
- Execution of a Python script at the shell prompt
- Code Documenting

Scoring

Rules will be distributed with the problem statement at the beginning of the contest time slot. In the event of a tie, Code Documentation and the use of Object Oriented Approach will determine the winner.

Schedule

For this contest, contestants will have a total time of 2 1/2 hours for the contest overview, contest work and turn in. See contest schedule for contest time and place. Check in will begin 20 minutes before the contest begins.