



RULES AND REGULATIONS

1. The DigiKey contest organizers will have final say in the interpretation of these rules and in the ruling of any unforeseen eventualities.
2. Teams will consist of no more than four students of junior or senior undergraduate level majoring in computer science, software engineering, or related field. Students must be majoring in the department their team represents and cannot compete at DKC³ more than twice during their college career.
3. Each team will be provided a workstation consisting of a PC running Windows 10, one 24" monitor, one keyboard and one mouse.
4. Each programming session will be hosted online and scored via CodeChef: <https://www.codechef.com/>. Teams will be provided an online terminal to write their programs, compile/test them, and ultimately submit them for scoring. Teams may submit a program for scoring as many times as they wish during a programming session. Languages currently supported by CodeChef include: C, C#, C++14, C++17, Go, Java, Kotlin, NodeJS, PHP, Python3, PyPy3, and Rust.
5. For assistance with code creation and Intellisense features, each workstation PC will have the following lightweight IDE installed and configured for C#, C++, Python, and Java. Teams may utilize the IDE and copy/paste or upload their code in the CodeChef submission terminal.
 - Visual Studio Code (Version 1.81) https://code.visualstudio.com/updates/v1_81
6. Contestants must use the equipment, software, and languages provided. They may not bring their own hardware or software. Competitors are expected to be familiar with CodeChef and additional software provided. No assistance will be given on how to use CodeChef, and DigiKey will not be held responsible for issues with the tools or software.
7. Contestants may bring and use calculators, books, manuals and notebooks to the competition.
8. Contestants cannot consult with a faculty advisor or another team during a competition session.
9. Contestants may not use portable electronic devices such as cell phones during a competition session. This includes the calculator app on your cell phone.
10. If a team has a question regarding a problem, only one member of the team may ask that question to the panel of competition judges, located at the front of the auditorium.
11. Time remaining will be announced when there is 30 min., 5 min. and 1 min. left in each session.
12. Once time is called, all contestants must stop typing or writing. Any team that continues working after time has been called risks losing all points for that session.
13. We ask that you refrain from taking any photos outside of the auditorium where the competition is held.
14. Please refer to the itinerary provided for an official schedule of events throughout the day. The itinerary should allow for ample restroom breaks, but if a competitor would like to use the restrooms outside the auditorium during an activity, they may do so at any time.

The Programs

Programs will be written and submitted via CodeChef's online terminal, and scored on output only. All programs should be written to read input and write output as stated in their corresponding problem statements. These problem statements will be available in CodeChef's online terminal and paper copies will also be distributed to each team before each programming session.

Example input and corresponding output are available with each problem statement and can be used to test individual programs before submission. However, teams may submit a program for scoring as many times as they wish during a programming session.

For more information about CodeChef and how these programs should be written and submitted, please refer to the links below:

- <https://www.codechef.com/ide>
- <https://www.codechef.com/wiki>
- <https://www.codechef.com/wiki/tutorial-inputoutput>

Scoring

Scoring for the competition will be based on three sessions (see itinerary). Two of the sessions will involve problems that must be solved by writing computer programs. One session will involve problems to be solved on paper.

For programming problems, points will be given for each test case for which a program gives the complete correct output. There are 10 predefined test cases each program will run against when submitted to CodeChef. Points for each test case will vary depending on the number of total points the problem is worth. Each program must complete execution within two minutes. Any program with a run-time exceeding this time frame will not be scored. It is the team's responsibility to ensure the programs read input and write output as specified in their problem statements.

For written problems, points will be given for complete correct answers. No partial points will be awarded. The point value of each problem will be listed with the problem descriptions.

Tie Breakers

In the event of a tie, an additional written problem session will be held. Each competitor will be given a set of short problems to solve within two minutes. This is an individual session and competitors will not be allowed to consult with other teammates. Individual scores for each competitor will be added up for the final team score.

Scoring for the tie breaker is as follows:

- Each correct answer: 1 point
- Each incorrect answer: -1 point
- Unanswered problem: 0 points

DIGIKEY PREMISES

DigiKey is a secure building and requires visitors to be escorted by a DigiKey employee at all times. Visitor passes must be worn around the neck, or placed visibly on the front of the visitor's shirt.

No smoking or use of tobacco/snuff is allowed at any time during the competition. This includes breaks and lunch.

When walking through office areas, please keep talking to a minimum as DigiKey representatives are on the phones with customers.

DRESS GUIDELINES

Dress for the competition is casual. For instance, jeans and tennis shoes are acceptable; however, hats, shorts and faded/torn jeans are not. Closed-toed shoes **must** be worn on tours of the warehouse facilities. We ask that competitors use common sense and consider what is appropriate for a business environment when choosing their attire.