Informatics Contests in Iran

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A series of informatics contests is held in Iran annually for students in various age groups. The main object of these informatics contests is to motivate and attract students to problem solving, algorithmic thinking and programming in an extra curriculum fashion.

Contests are being held both in school and college levels mainly in a teamwork but in some of them individuals also can compete.

We briefly describe and introduce some of these contests.

1. Iranian National Olympiad in Informatics

Started in 1991, the Iranian National Olympiad in Informatics (INOI) is simply the oldest nationwide informatics contest in Iran. Besides promoting informatics and computational thinking among school students, the contest serves as the main process for selecting Iranian teams to participate in the IOI. The contest has several rounds, all organized by the Young Scholars Club, a national entity responsible for organizing scientific Olympiads in Iran. More than 4,000 students from grades 10 and 11 participated in the first round of INOI in 2016.

2. HelliNet

HelliNet is a nationwide programming contest aimed at promoting and enhancing problem solving and programming skills among school students in Iran (Fig. 1). Initiated in 2005 by Allameh Helli high school (Tehran, Iran), the contest is now one of the biggest on-site programming contests in Iran.

There are two tracks in the contest, one for students in grades 7 to 9, and the other for grades 10 to 12. The contest is team-based, with each team consisting of two students.

Fig. 1. HelliNet has attracted many students.

More than 160 teams participated in the 10th HelliNet contest in 2016. HelliNet is very popular among high school students.

3. Bebras

Bebras is an international initiative for promoting computer science (informatics) and computational thinking among school students at all ages (www.bebras.org). Initiated in 2004 in Lithuania, the community now includes over 50 countries. Iran joined the Bebras community in 2014, and organized the first official Bebras challenge in 2015 via Fatemi Cultural Institute. Almost 3,000 school students participated the first challenge in five groups, ranged from grade 3 to grade 12.

Fig. 2. Logo of Bebras in Iran.

4. Bayan Programming Contest

Initiated in 2012, Bayan is an international programming contest held by Bayan software company in Iran. More than 10,000 contestants from 103 countries participated in the third Bayan Programming Contest in 2014–2015. Bayan Programming Contest is a three rounds contest such that two first rounds are online and final round is hosted by Bayan Company. The contest has been an attractive target for students from all age groups, with a ranking page particularly devoted to school students.

Fig. 3–4. Moments from the Bayan, a worldwide contest.

5. ICPC Tehran Site

The ACM-ICPC is one of the oldest programming contests in the world for the college students. Since 1998, Tehran has served as one of the official sites for the ACM-ICPC in the west Asia region, hosted and organized by Sharif University of Technology. Over

Fig. 5. ACM-ICPC has attracted many college students

the past 18 years, 36 Iranian teams have been qualified to the ICPC World Finals from the Tehran site, with their best result being the world finals silver medalist in 2001. Besides being a main target for IOI medalists in Iran, the Tehran Site also organizes several satellite Internet programming contests, in which school students actively participate and compete.

6. Community of Problem-Solvers

Informatics contests have developed a community of problem solvers and algorithmic thinkers' nationwide. Some of them have been attracted to computer science, mathematics and engineering which have joined as sophisticated programmers and developers in software companies and some of them have gone for graduate studies and are prominent faculty and researcher.
That is the way it is…

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