

DEV iO

Introduction to Competitive Programming

by Shubham Goswami

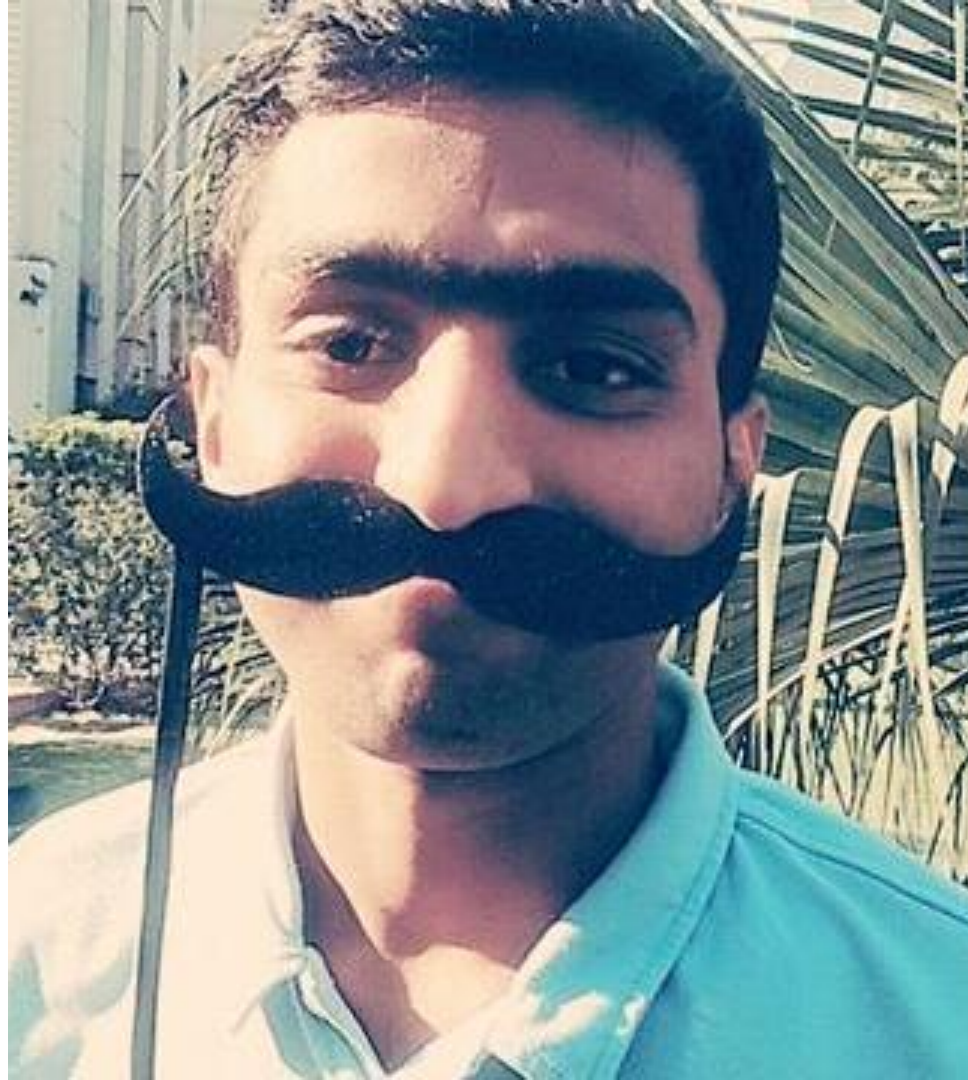


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Competitive Programmer



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INTRODUCTION TO
COMPETITIVE
PROGRAMMING

How many have heard
about Competitive
Programming ?

How many people know
what is Competitive
Programming ?



What it is Competitive Programming ?

Competitive Programming is a sport.

***Mind Sport**

Competitive programming combines two topics

- the design of algorithms and
- the implementation of algorithms.



Programming languages ?



What Next ?

Online Judge

- HackerRank
- Codechef
- Codeforces
- HackerEarth
- SPOJ
- A2OJ



HackerRank



Online Programming Contest/Practice

- Problem Statement
- Constraints
- Input and Expected O/P
- Sample test case(s)
- Time Limit
- And Memory Limit

Time Limit: 1 secs

Source Limit: 50000 Bytes

Constraints

- $1 \leq T \leq 10$
- $1 \leq K \leq N \leq 50$
- $1 \leq A_i \leq 100$ for each valid i

Example Input

```
1
4 2
1 2 3 4
```

Example Output

```
1
```


Possible Result

- Wrong Answer (WA)
- Error
- Partially Accepted
- Accepted (AC)

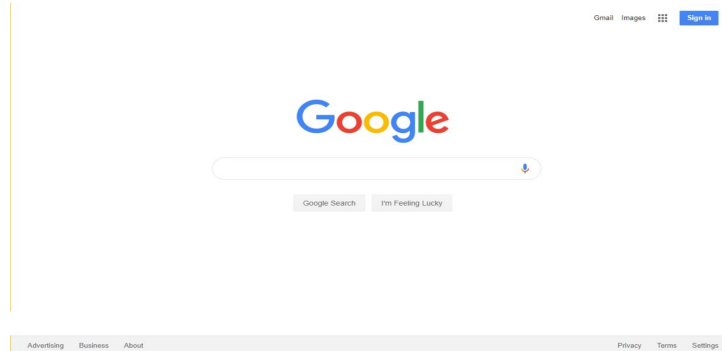
Result (time)
AC (0.010000)
AC (0.010000)
Result - AC
AC (0.010000)
Result - AC

Errors may encounter

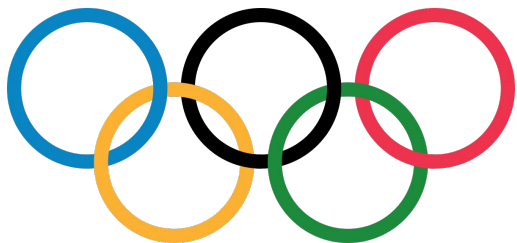
- Compilation Error
- Run time error
 - Segmentation Fault
 - Divide by zero
- Time Limit Exceed (TLE)

AC (0.000000)
TLE (1.010000)
TLE (1.010000)

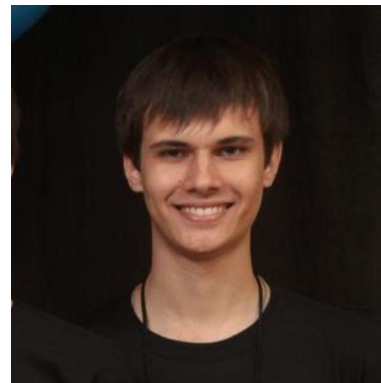
Meet our new Friends ?



Talking about sports



acm International Collegiate
Programming Contest





Google Summer of Code

code jam

code jam

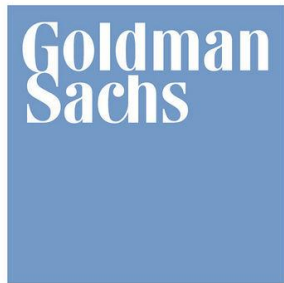
kickstart

facebook
HACKER CUP



Why it is important ?

amazon



Any Shortcut ?



Developer Student Clubs





Resources to get started?

bit.ly/dsckiet-dsa

Thank you

Contact us at:



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