



D'Codr

Code-Ignitor

Problem Solving Workshop by **D'CODR**



Agenda

- What is Problem Solving?
- DSA
- CP
- Getting Started
- Some Popular Platforms
- Contests and Upsolving
- Resources
- A Problem for You

What is Problem Solving?

Breaking down a **Complex Problem** into
Simpler Sub-Problems and then solving
them!



DSA - Data Structures and Algorithms

Data Structures

Stack

Queue

Tree

Graph

Algorithms

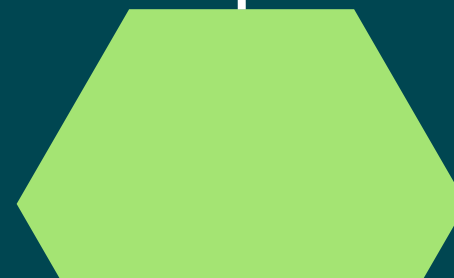
Greedy

Divide and Conquer

Dynamic

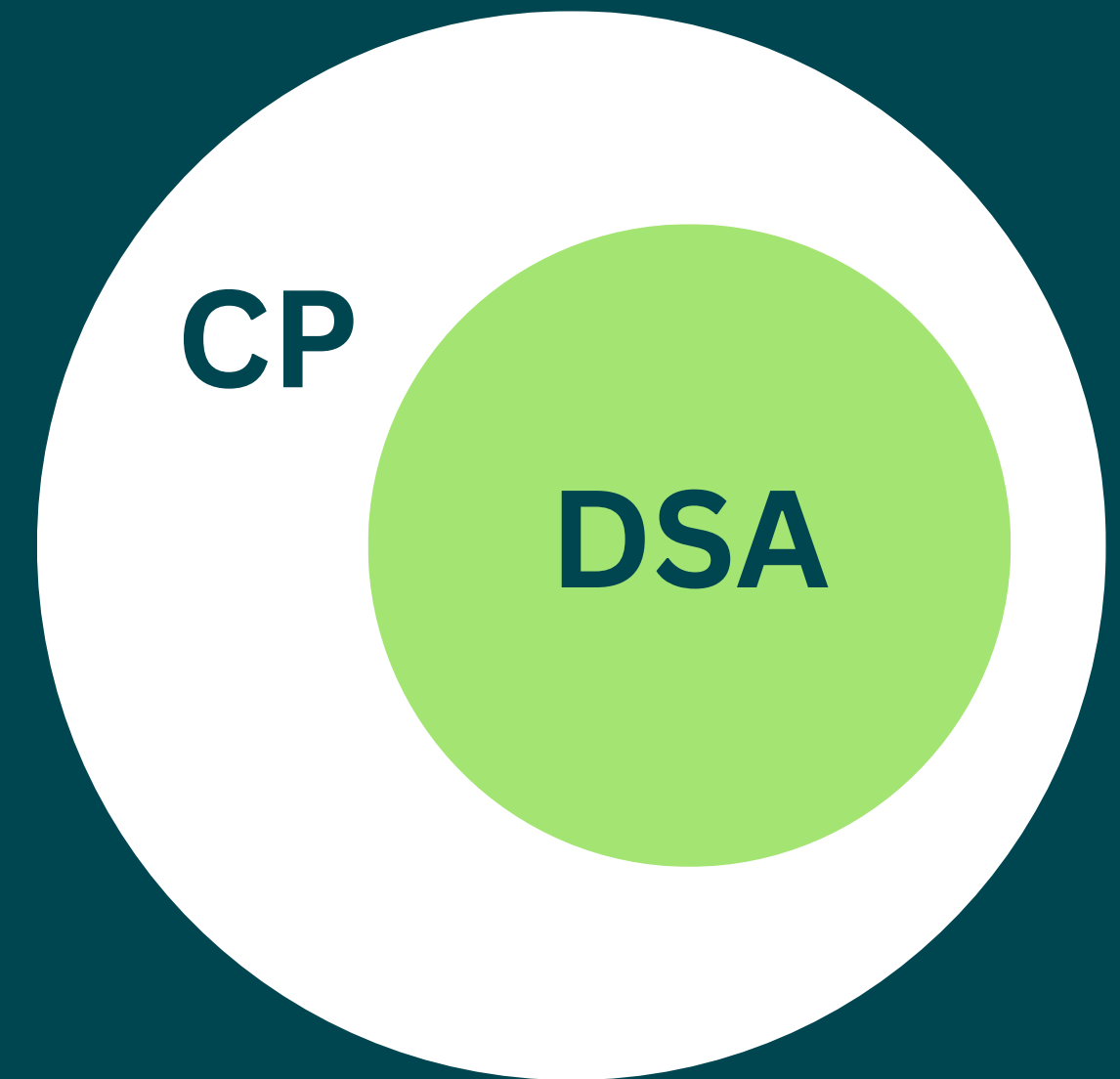
Programming

Bit Manipulation



◆ CP - Competitive Programming

CP = Math + DSA + Time Limit



Jigyashu Gupta



Jigyashu Gupta

jigyashu72

Rank **40,597**

Wannabe nerd and aspiring geek.

India

JigyashuGupta

Community Stats

Views **2.4K**

Last week **+4**

Solution **11**

Last week **0**

Discuss **0**

Last week **0**

Reputation **10**

Last week **0**

Languages

Java

633 problems solved

MySQL

1 problem solved

Contest Rating
1,967

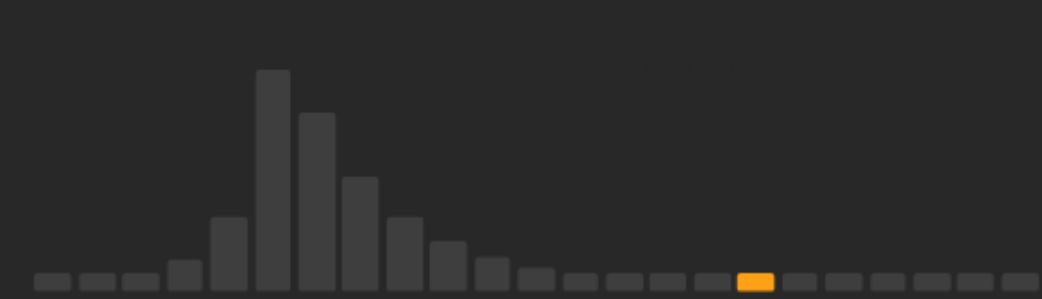


Level
Knight

Global Ranking
13,772/447,863

Attended
20

Top
3.24%



Solved Problems



Easy **165 /720** Beats **96.9%**

Medium **382 /1522** Beats **98.6%**

Hard **88 /634** Beats **96.9%**

Badges

11



Most Recent Badge
Knight

910 submissions in the last year

Total active days: **283** Max streak: **54**

Current



Yashesh Bhavsar

(Ex-Sec. D'Codr)



[YASHESH_07](#) [BLOG](#) [TEAMS](#) [SUBMISSIONS](#) [CONTESTS](#)

Expert

yashesh_07 ★

📊

Contest rating: **1720** (max. **expert**, 1747)

★

Contribution: 0

★

Friend of: 16 users

Last visit: **online now**

Registered: 19 months ago

📄

[Blog entries \(0\)](#), [comments](#)

✉

[Talks](#) | [Send message](#)

Yashesh Bhavsar

(Ex-Sec. D'Codr)



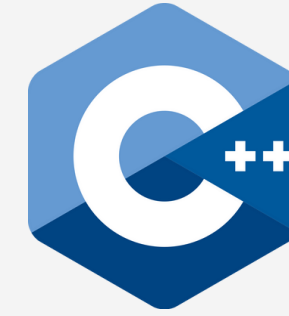


Getting Started

Step - I

Pick up a Coding Language

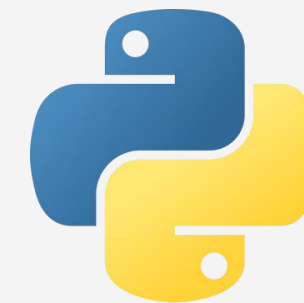
C++



Java



Python












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HackerRank

An inclusive and defined path to learn any language of your choice! HackerRank covers every aspect of a programming language from basics to advance.

Prepare By Topics

 Algorithms	 Data Structures	 Mathematics
 Artificial Intelligence	 C	 C++
 Java	 Python	 Ruby
 SQL	 Databases	 Linux Shell
 Functional Programming	 Regex	

Step - II

Practice Practice and Practice

Leetcode



Codeforces



Codechef



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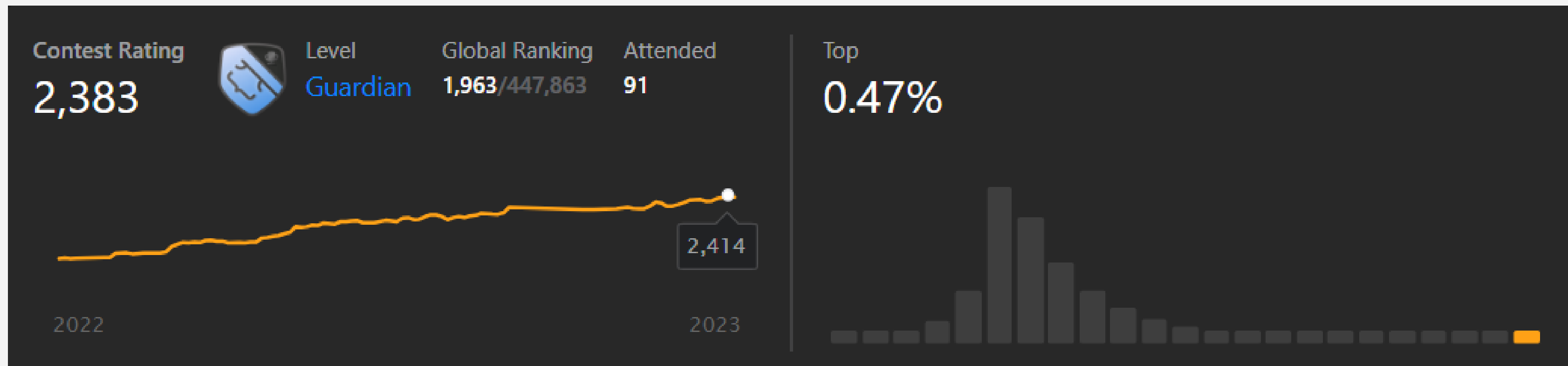


Some Popular Platforms:

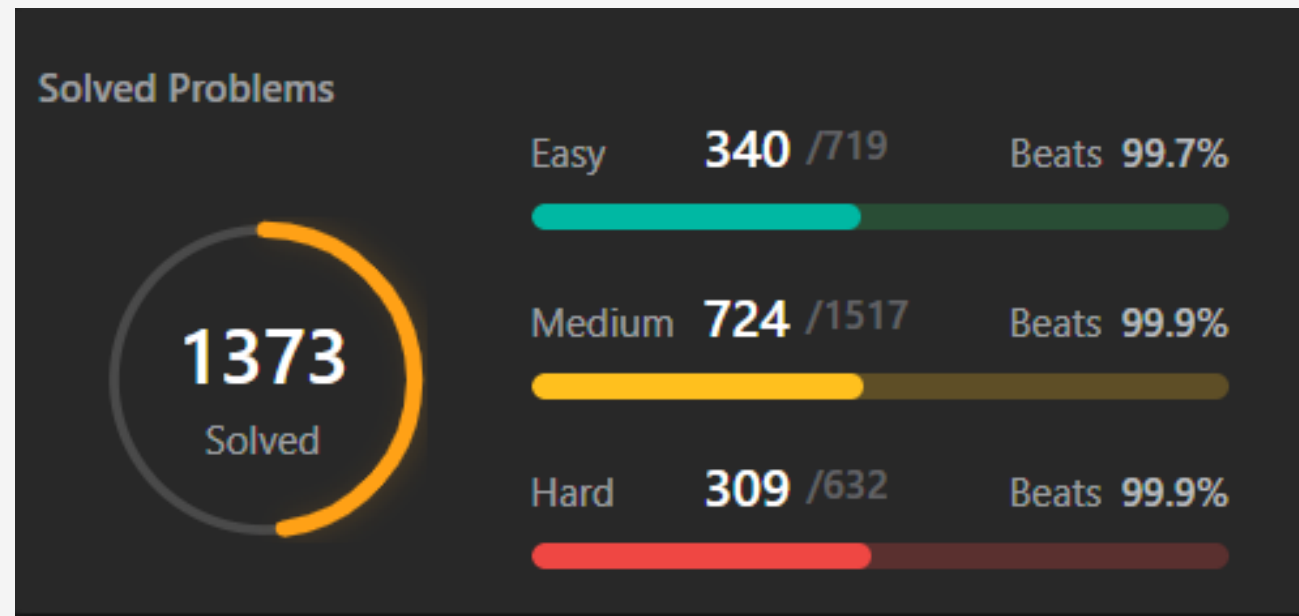


LeetCode

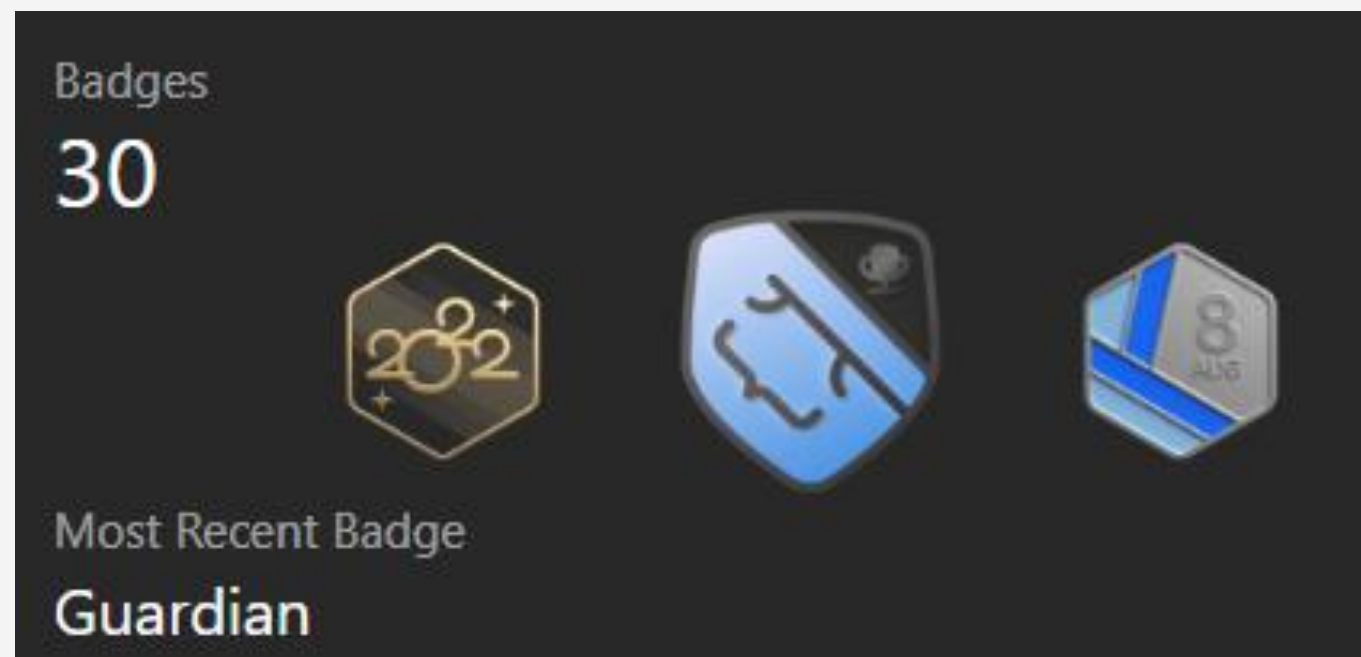
- **A Global Rating System based on Contests**
 - **Biweekly Contest**
 - **Weekly Contest**



- **A vast and inclusive problem set mainly focused on Data Structures and Algorithms making Leetcode the best interview preparation tool.**



- **Daily Problems, Badges and Courses**





Codeforces

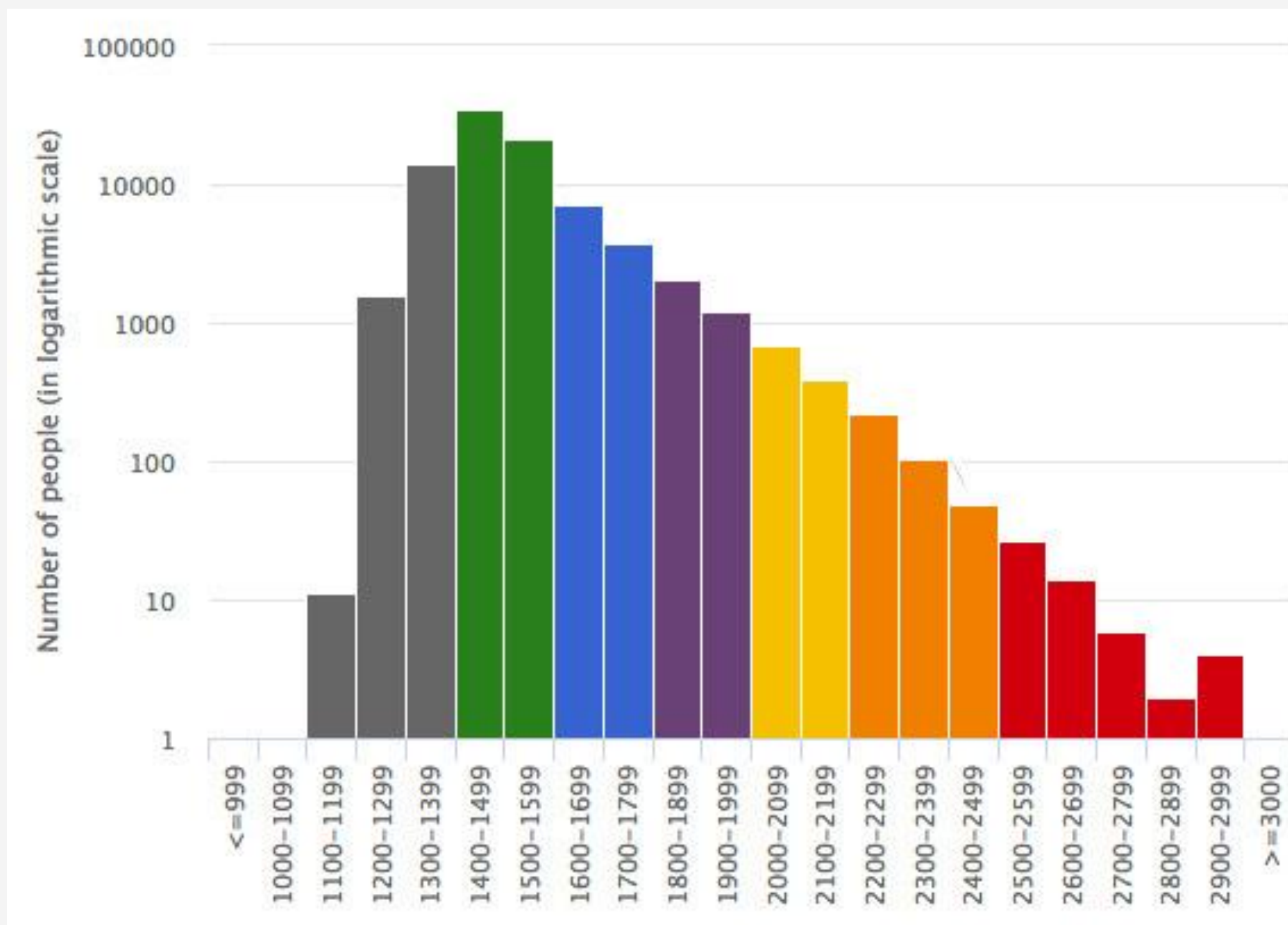
- **The most popular CP platform in the world. It has the following rating levels:**

Rating Bounds	Color	Title	Division	Number	Number (by color)
≥ 3000	Red	Legendary Grandmaster	1	14	261
2600 — 2999	Red	International Grandmaster	1	90	
2400 — 2599	Red	Grandmaster	1	157	
2300 — 2399	Orange	International Master	1	134	792
2100 — 2299	Orange	Master	1	658	
1900 — 2099	Violet	Candidate Master	1/2	2101	2101
1600 — 1899	Blue	Expert	2	5186	5186
1400 — 1599	Cyan	Specialist	2/3	10408	10408
1200 — 1399	Green	Pupil	2/3	15584	15584
≤ 1199	Gray	Newbie	2/3	6250	6250



Codechef

- The most popular Indian CP platform. It has the following rating levels:

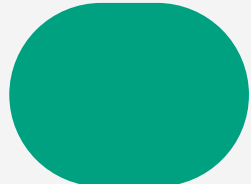
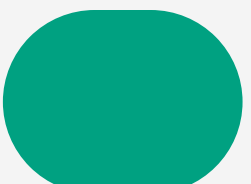





Contests and Upsolving

Contests



-  **Timed competition to solve problems!**
-  **Advantages: Competitive Spirit, Job and Internship Opportunities, Prizes etc.**
-  **A sense of community and healthy competition among peers!**

Some Common Terms



 **TLE - Time Limit Exceeded**

 **AC - Accepted**

 **RE - Runtime Error**

 **Edge Cases : Look out!**

Upsolving



- **What is Upsolving?**
- **Upsolve to your level**
- **Be Consistent and see improvement!**



Resources

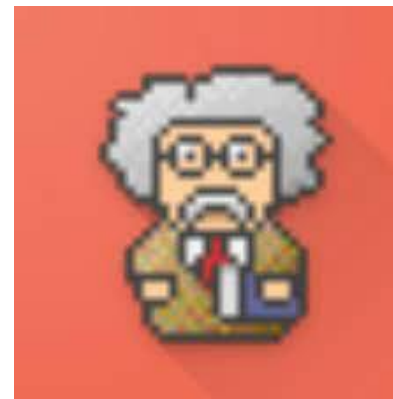
GeeksforGeeks



CSES



CP-Algorithms





**A Problem for
You!**

A. Watermelon

time limit per test: 1 second

memory limit per test: 64 megabytes

input: standard input

output: standard output

One hot summer day Pete and his friend Billy decided to buy a watermelon. They chose the biggest and the ripest one, in their opinion. After that the watermelon was weighed, and the scales showed w kilos. They rushed home, dying of thirst, and decided to divide the berry, however they faced a hard problem.

Pete and Billy are great fans of even numbers, that's why they want to divide the watermelon in such a way that each of the two parts weighs even number of kilos, at the same time it is not obligatory that the parts are equal. The boys are extremely tired and want to start their meal as soon as possible, that's why you should help them and find out, if they can divide the watermelon in the way they want. For sure, each of them should get a part of positive weight.

Input

The first (and the only) input line contains integer number w ($1 \leq w \leq 100$) — the weight of the watermelon bought by the boys.

Output

Print YES, if the boys can divide the watermelon into two parts, each of them weighing even number of kilos; and NO in the opposite case.

You are all set to embark
on your Coding Journey!

Thank You!

