*********COMPETITIVE PROGRAMMING by Dhruv Kothari❤ **********

P.S. - I am sharing my journey of Competitive Programming, I am also a noob, so please correct me if I am wrong anywhere.
Also, I am not promoting any of my articles or videos or GitHub repos. I am just sharing with you so that at the end of the day you can find some good resources from them.

So guys the first question that arises is What is CP(COMPETITIVE PROGRAMMING) ??
Ans. According to me, competitive programming is a sport. A sport based on problem-solving skills, thinking ability, speed testing, regularity and to be precise. Competitive Programming will help you building logic and implementing that logic to find solutions to a real-world problem.

More such W's like Why, When and Form Where to Start CP you can refer my article:
https://medium.com/dsc-dypcoe/complete-guide-to-kick-off-competitive-programming-f722b366fafe
This article will give you an answer to all your queries related to CP. (I don't want to make the Facebook post long, that's why sharing links.)

Next Big Question. Which language to choose?
Again, there are no such restrictions, you can go for C, C++, Java, Python, JS, Perl....and the list goes on and on. But IMO I would suggest either C++ or JAVA.
Reasons:
1. almost every coding platform supports C++ and JAVA.
2. both are OOPs, and majorly asked in interviews.
3. JAVA has an awesome collections library to handle most DS.
4. C++ has a pretty short syntax which makes things faster.

But if you are new to both C++ as well as JAVA, then i would suggest going with C++, as JAVA is verbose(long syntax).

Now let's begin with the core part.
Roadmap of CP
Here is an awesome Roadmap I have created for CP.
Link - https://coggle.it/diagram/XxbtnUXhP7cedHdu/t/level-1
You can refer to this roadmap. Start from level one and go step by step. Feel free to ask doubt wherever you get stuck.

Now, a few months ago, I delivered a session on CP in my college which include all the above points, so you guys can refer to this for a better understanding
Welcome to the World Of Competitive Programming! - https://www.youtube.com/watch?v=LzpFe3COcdc

Now moving towards the next part.
Here is my Github repo dedicated for CP.
Repo Link - https://github.com/kothariji/competitive-programming

You guys can refer to this repo, I have prepared a curated list for
1. all the coding platforms like HackerEarth, CodeForces, HackerRank, Codechef, etc.,
2. Books to refer for CP
3. Topic-wise content to study with youtube playlist links.

Resources(MOST IMPORTANT):
1. Juniors Training Sheet, by Mostafa Saad Ibrahim -
https://docs.google.com/spreadsheets/d/1iJZWP2nS_OB3kCTjq8L6TrJJ4o-5lhxDOyTaocSYc-k/edit#gid=84654839
make a copy of this spreadsheet and start solving questions from A level.

2. If you are focussing from the Placement Point of view then you can refer Love Babbar 450 question list -
https://docs.google.com/spreadsheets/d/1FMdN_OCfOI0iAeDlqswCiC2DZzD4nPsb/edit#gid=1773184282
3. A great CF blog for all cp resources - https://codeforces.com/blog/entry/23054
4. Stanford University ICPC Team Notebook -
https://cs.stanford.edu/group/acm/SLPC/notebook.pdf
5. CP HandBook
-https://jadi.net/wp-content/uploads/2017/07/competetive-programmers-handbook.pdf
6. C++ STL Reference Manual -
https://www.cppreference.com/Cpp_STL_ReferenceManual.pdf

For Dynamic Programming, you can refer to my repo -
https://github.com/kothariji/Dynamic_Programming_Journey
and Aditya Verma playlist which is one of the best playlist -
https://www.youtube.com/watch?v=nqowUJzG-iM&list=PL_z_8CaSLPWekqhdCPmFohncHwz8TY2Go

Now most of the students like me suffer when we get logical errors and we couldn't figure it out. So for that, there are visualizers
Code Visualisation Tools🔆🔆
C++ Code Visualisation - http://pythontutor.com/cpp.html#mode=edit
JAVA Code Visualisation - http://pythontutor.com/java.html#mode=edit
PYTHON Code Visualisation - http://www.pythontutor.com/visualize.html#mode=edit

Also if you want to visualize Data Structures and algorithms, then visit VisuAlgo -
https://visualgo.net/en
If you are just staring with CP, you can also refer to these articles
https://www.codechef.com/getting-started
https://www.geeksforgeeks.org/how-to-prepare-for-competitive-programming/
https://www.hackerearth.com/practice/notes/getting-started-with-the-sport-of-programming/
https://www.freecodecamp.org/news/the-10-most-popular-coding-challenge-websites-of-2016-fb8a5672d22f/
https://www.codechef.com/certification/data-structures-and-algorithms/prepare

Will add more things soon. Please share your feedback/opinions/queries in the comment section