Athira, Souranil and many more developers have solved Geektrust coding challenges to find great jobs.

✳ **Get feedback** on your coding skills. Detailed, handcrafted feedback on your code.

✳ **Get priority** and be treated as a premium candidate to directly connect with decision makers at companies.

✳ **Get membership** and win an exclusive Geektrust DEVELOPER t-shirt given when you write good code.

What we look for in your code - It's not just about getting output, but how you get it. We care about how well modelled your code is, how readable, extensible, well tested it is. Have questions on the challenges or our evaluation? Ping us on the Geektrust Slack channel.
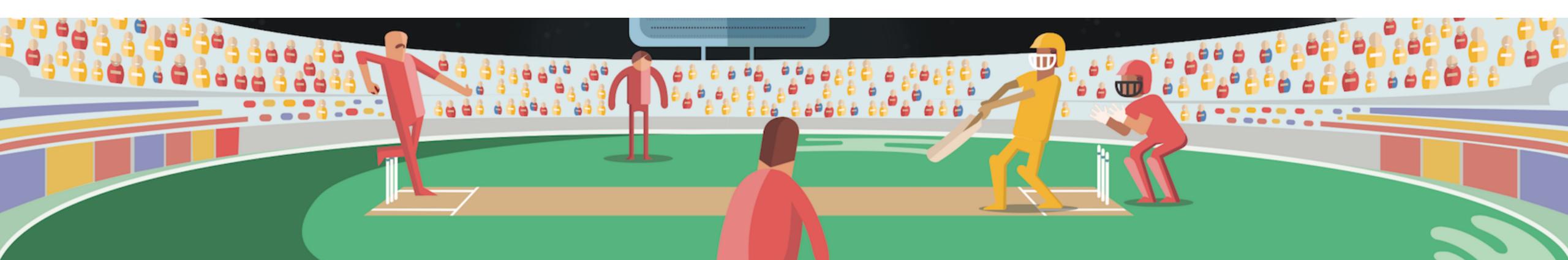
GETTING STARTED

1. Getting the output right is important, but clean code is more important. You should **absolutely** <u>read this post</u> on what we look for in your code, and how to get started with the coding challenge.

2. Remember, we expect a command line app. So no web apps will be considered for evaluation.

3. Usage of non-essential 3rd party libraries will affect your evaluation.

4. Add a readme with how to get your code working, and how to test your code.

5. If you have questions on the coding challenges, your evaluation, or on companies, you can ping us on our <u>Slack channel</u> or mail us at <u>devs@geektrust.in</u> saying "Add to slack".

PROBLEM CONTEXT

Our problem is set in the planet of Lengaburu, in the distant distant galaxy of Tara B. And it's the finals of the Intergalactic T20 Cup! Lengaburu and Enchai, neighbours and fierce rivals, are fighting it out for the title.

Lengaburu's star batsman Kirat Boli is at the crease. Can he win it for Lengaburu? Write code to simulate the last 4 overs of the match.
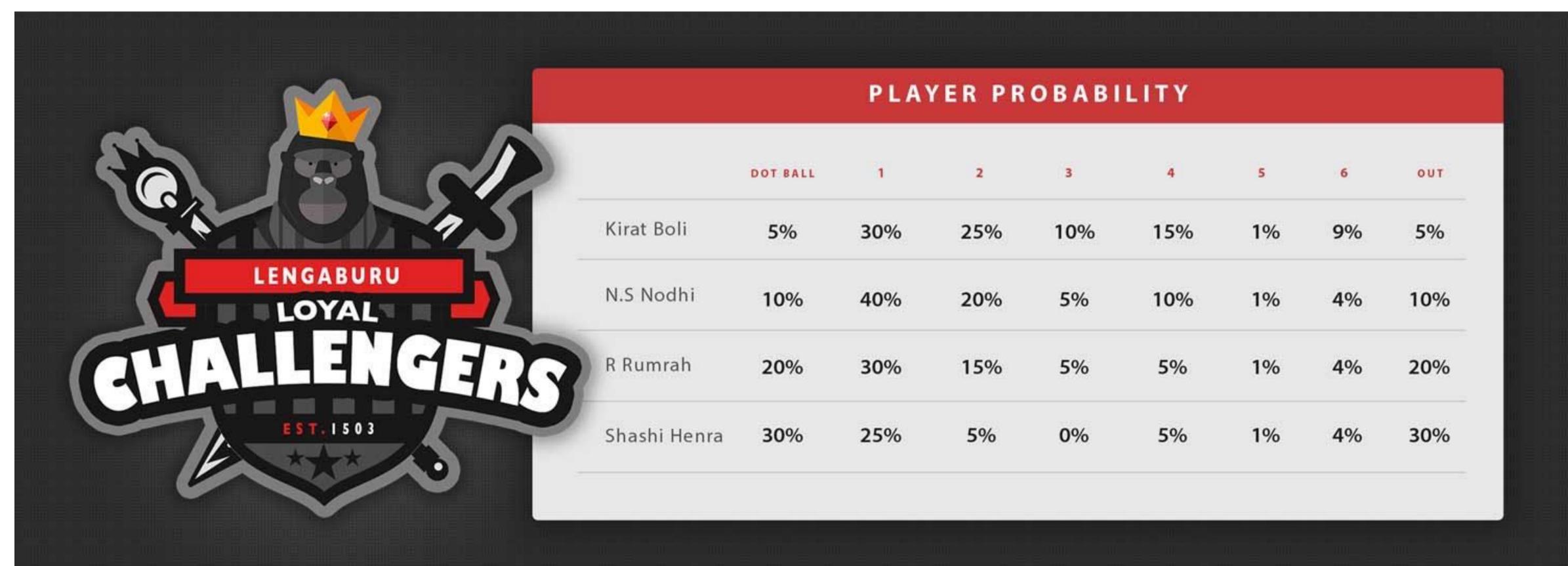
PROBLEM 1: THE LAST FOUR

It's the last 4 overs of the match. **Lengaburu needs 40 runs to win and with 3 wickets left**. Each player has a different probability for scoring runs. Your coding problem is to simulate the match, ball by ball.

The match simulation will require you to use a weighted random number generation based on probability to determine the runs scored per ball. For this randomizer, you can use any external library of your choice (if you wish to, the choice is yours).

PROBABILITY TABLE

PLAYER PROBABILITY

	DOT BALL	1	2	3	4	5	6	OUT
Kirat Boli	5%	30%	25%	10%	15%	1%	9%	5%
N.S Nodhi	10%	40%	20%	5%	10%	1%	4%	10%
R Rumrah	20%	30%	15%	5%	5%	1%	4%	20%
Shashi Henra	30%	25%	5%	0%	5%	1%	4%	30%

▌Rules of the Game

1. Batsmen change strike end of every over. They also change strike when they score a 1,3 or 5
2. When a player gets out, the new player comes in at the same position.
3. Assume only legal balls are bowled (no wides, no no-balls etc..). Therefore an over is always 6 balls.

VS

RULES OF CRICKET

1. Batsmen change strike end of every over. They also change strike when they score a 1,3 or 5

2. When a player gets out, the new player comes in at the same position.

3. Assume only legal balls are bowled (no wides, no no-balls etc..). Therefore an over is always 6 balls.

SAMPLE OUTPUT

Lengaburu won by 1 wicket and 2 balls remaining

Kirat Boli - 12 (6 balls)
NS Nodhi - 25 (11 balls)
R Rumrah - 2* (3 balls)
Shashi Henra - 2* (2 balls)

Sample commentary

4 overs left. 40 runs to win

0.1 Kirat Boli scores 1 run
0.2 NS Nodhi scores 4 runs
0.3 NS Nodhi scores 1 run
0.4 Kirat Boli scores 2 runs
0.5 Kirat Boli scores 3 runs
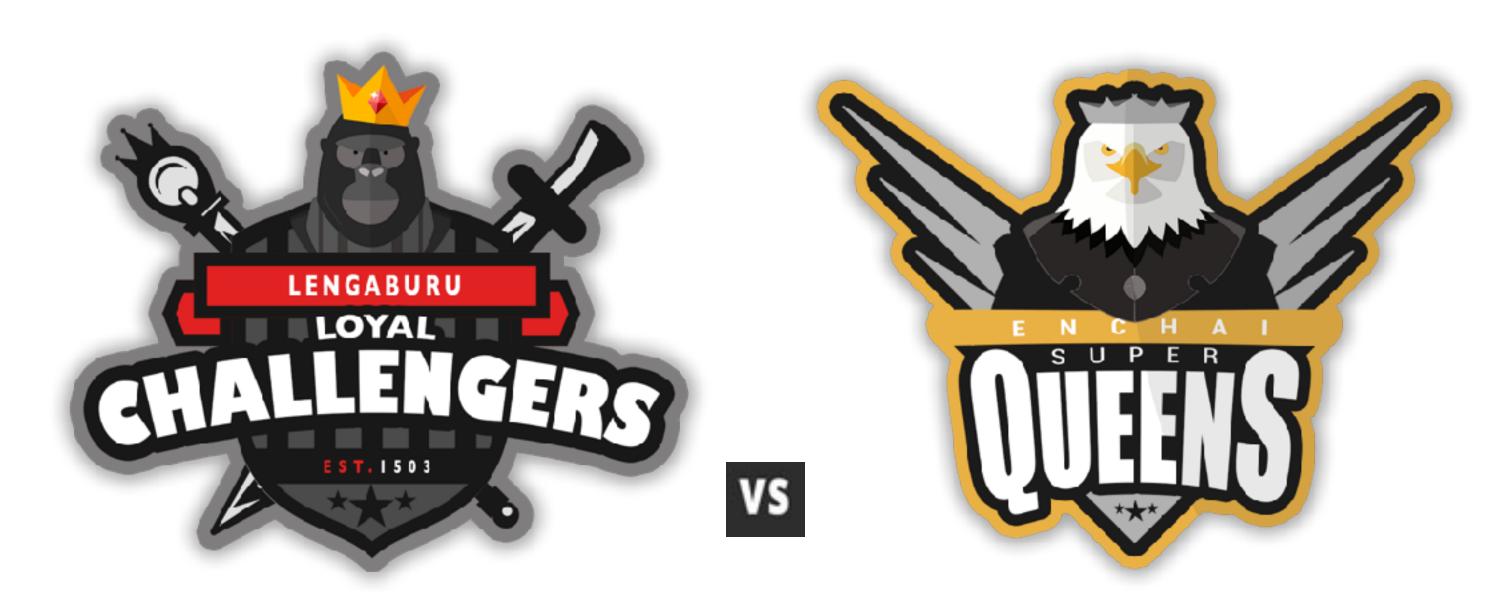0.6 NS Nodhi scores 1 run

3 overs left. 28 runs to win

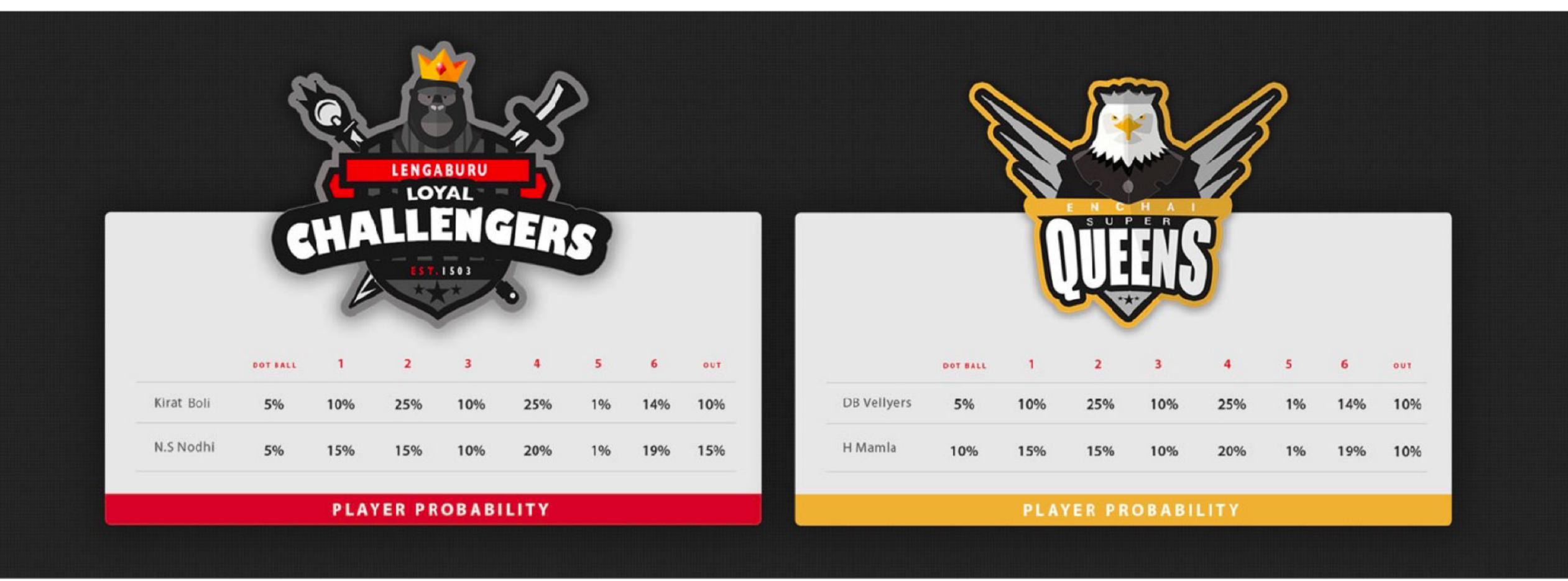1.1 NS Nodhi scores 2 runs
….

Note: You can assume both Kirat Boli and NS Nodhi are batting on 0* when the simulation begins

PROBLEM 2: THE TIE BREAKER

The final has resulted in a tie! Just like '07. Now the result will be decided by a one over tie breaker. 2 batsmen, 6 balls, who will win?

PROBABILITY TABLE

LENGABURU LOYAL CHALLENGERS

	DOT BALL	1	2	3	4	5	6	OUT
Kirat Boli	5%	10%	25%	10%	25%	1%	14%	10%
N.S Nodhi	5%	15%	15%	10%	20%	1%	19%	15%

PLAYER PROBABILITY

ENCHAI SUPER QUEENS

	DOT BALL	1	2	3	4	5	6	OUT
DB Vellyers	5%	10%	25%	10%	25%	1%	14%	10%
H Mamla	10%	15%	15%	10%	20%	1%	19%	10%

PLAYER PROBABILITY

Note: Probability chart for Kirat Boli and NS Nodhi have changed from problem 1 (to reflect a 1 over match)

SAMPLE OUTPUT

Enchai won with 4 balls remaining

Lengaburu
Kirat Boli - 4 (2 balls)
NS Nodhi - 0* (0 balls)

Enchai
DB Vellyers - 1* (1 ball)
H Mamla - 4* (1 balls)

Sample commentary

Lengaburu innings:
0.1 Kirat Boli scores 4 runs!
0.2 Kirat Boli gets out! Lengaburu all out

Enchai innings:
0.1 DB Vellyers scores 1 run
0.2 H Mamla scores 4 runs! Enchai wins!

Note: Assume Lengaburu always bats first

CHECK LIST - SUBMITTING CODE

1. Please compress the file before upload. We accept .zip, .rar, .gz and .gzip

2. Name of the file should be the problem number you are solving. For e.g. if you have solved problem 1&2, please name your file 'Set4problem12.zip'.

3. We advise not to put your personal details in your solution as we maintain your anonymity with a company until there is genuine interest from them.

4. Please upload only source files and do not include any libraries or executables or node_modules folder.

5. You can expect your evaluation in 3-5 working days.

6. Yes, you can resubmit code based on our feedback. We accept 3 submissions in total. So do implement all feedback and make your submissions count!

WHAT NEXT?

A few good developers

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Write Code
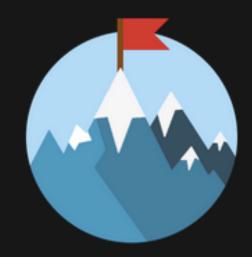
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