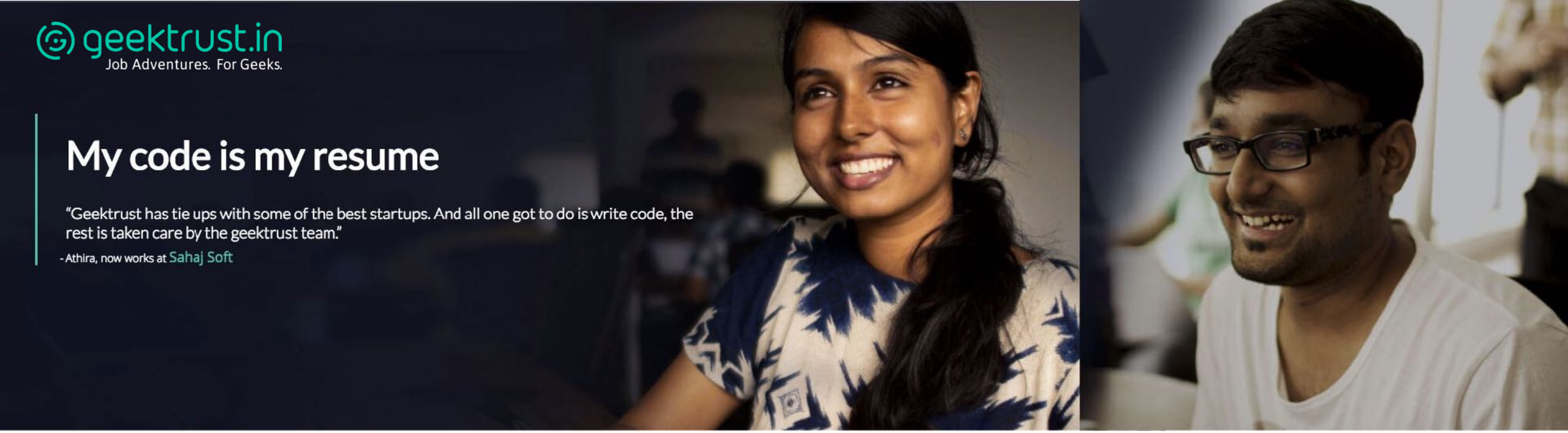


Athira, Souranil and many more developers have solved Geektrust coding challenges to find great jobs.

- **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** read this post 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 Slack channel or mail us at devs@geektrust.in saying “Add to slack”.

PROBLEM CONTEXT

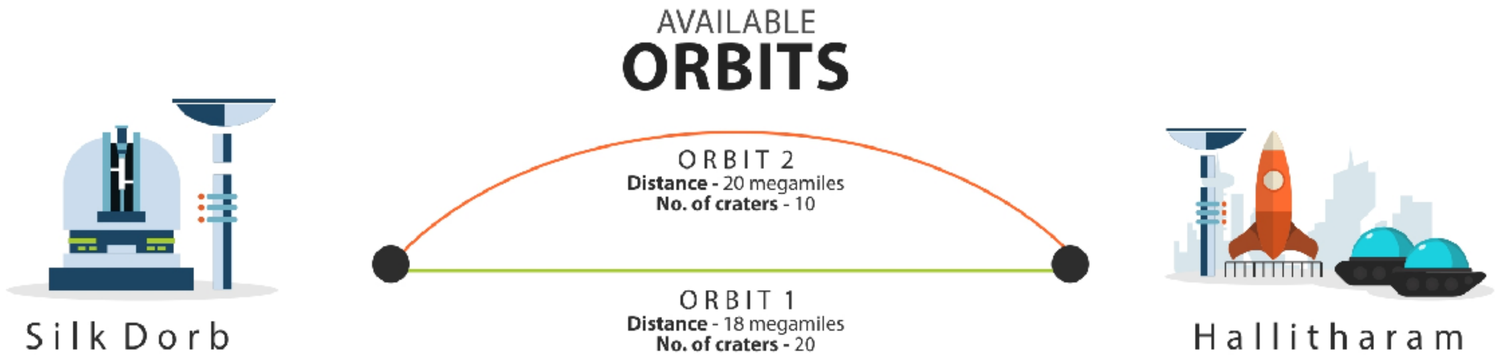
Our problem is set in the traffic snarls of planet Lengaburu. After the recent Falicornian war, victorious King Shan of Lengaburu wishes to tour his kingdom. But the traffic in Lengaburu is killing. You should see how Silk Dorb gets jammed in the evening!

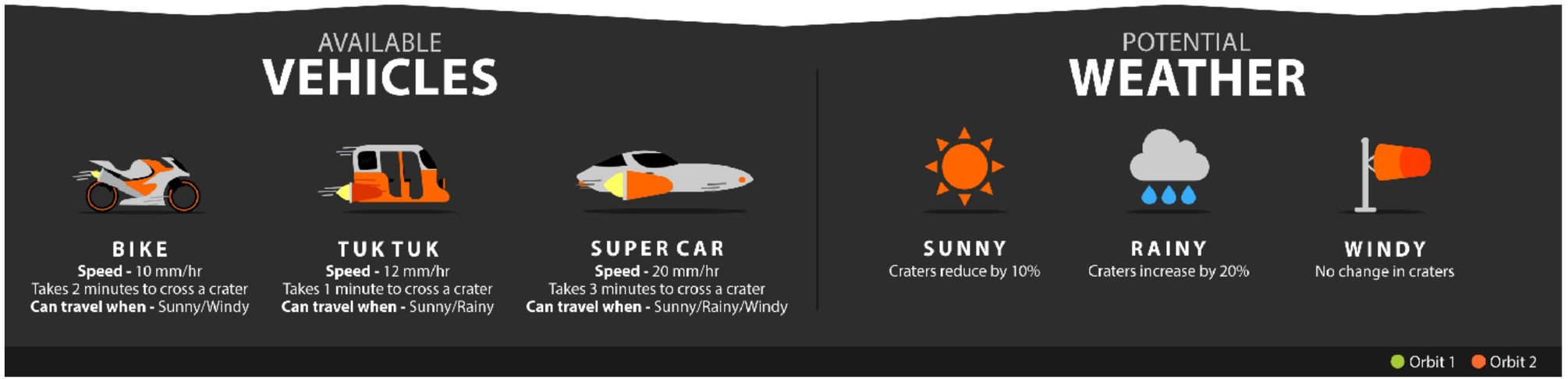
Write code to help King Shan navigate Lengaburu's traffic. You could write this from scratch or you could refactor this poorly written code —> https://github.com/geektrust/lengaburu-traffic.

PROBLEM 1: LENGABURU TRAFFIC

King Shan wants to visit the suburb of Hallitharam, and has 2 possible orbits and 3 possible vehicles to chose from.

Your coding challenge is to determine which orbit and vehicle King Shan should take to reach Hallitharam the fastest.





PROBLEM 1: LENGABURU TRAFFIC

Goal: to go from Silk Dorb to Hallitharam in the shortest time possible.

Orbit options:

Orbit 1 - 18 mega miles & 20 craters to cross

Orbit 2 - 20 mega miles & 10 craters to cross

Vehicle options:

Bike - 10 megamiles/hour & takes 2 min to cross 1 crater

Tuktuk - 12 mm/hour & takes 1 min to cross 1 crater

Car - 20 mm/hour & takes 3 min to cross 1 crater

Weather conditions (affects the number of craters in an orbit):

Sunny - craters reduce by 10%. Car, bike and tuktuk can be used in this weather.

Rainy - craters increase by 20%. Car and tuktuk can be used in this weather.

Windy - no change to number of craters. Car and bike can be used in this weather.

SAMPLE INPUT & OUTPUT

Sample Input & Output |

```
Input: Weather is Sunny
Input: Orbit1 traffic speed is 12 megamiles/hour
Input: Orbit2 traffic speed is 10 megamiles/hour
Expected Output: Vehicle TukTuk on Orbit1
```

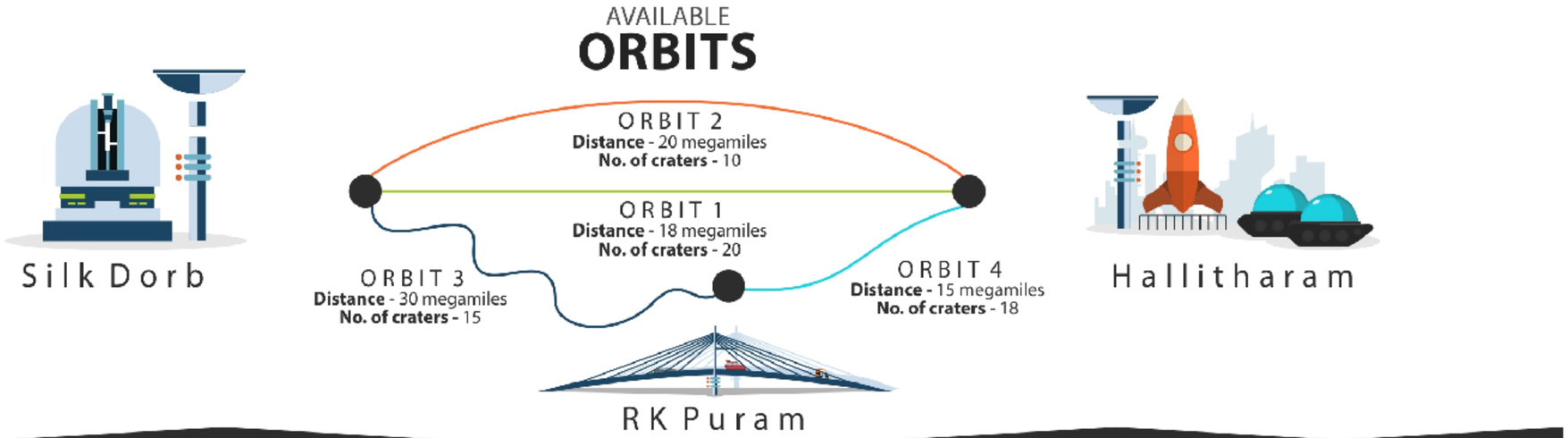
Sample Input & Output ||

```
Input: Weather is Windy
Input: Orbit1 traffic speed is 14 megamiles/hour
Input: Orbit2 traffic speed is 20 megamiles/hour
Expected Output: Vehicle Car on Orbit2
```

Note: A vehicle cannot travel faster than the traffic speed for an orbit. So even though a car's max speed is 20 megamiles/hour, it can only go at 10 megamiles/hour if that is the traffic speed for that orbit. Also, if there is a tie in which vehicle to choose, use bike, auto,car in that order.

PROBLEM 2: MISSION IMPOSSIBLE

King Shan now would like to visit Hallitharam and RK Puram on the same day. Write code to determine which orbits & vehicle he should take to visit both destinations in the quickest possible time.



SAMPLE INPUT & OUTPUT

Sample Input & Output |

```
Input: Weather is Sunny
Input: Orbit1 max traffic speed is 20 megamiles/hour
Input: Orbit2 max traffic speed is 12 megamiles/hour
Input: Orbit3 max traffic speed is 15 megamiles/hour
Input: Orbit4 max traffic speed is 12 megamiles/hour

Expected Output: Vehicle TukTuk to Hallitharam via Orbit1 and RK Puram via Orbit4
```

Sample Input & Output ||

```
Input: Weather is Windy
Input: Orbit1 max traffic speed is 5 megamiles/hour
Input: Orbit2 max traffic speed is 10 megamiles/hour
Input: Orbit3 max traffic speed is 20 megamiles/hour
Input: Orbit4 max traffic speed is 20 megamiles/hour

Expected Output: Vehicle Car to RK Puram via Orbit3 and Hallitharam via Orbit4
```

Note: You can choose only 1 vehicle for the entire trip. You cannot change vehicle after reaching the first destination.

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 ‘Set3problem12.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

Write great code. Get membership. Explore jobs.

Write Code

Sign up to solve interesting coding problems

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Clear evaluation and get featured on GeekTrust

Connect with Companies

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Find the Perfect Job

Review options, interview & find the right job for you