### Problem context

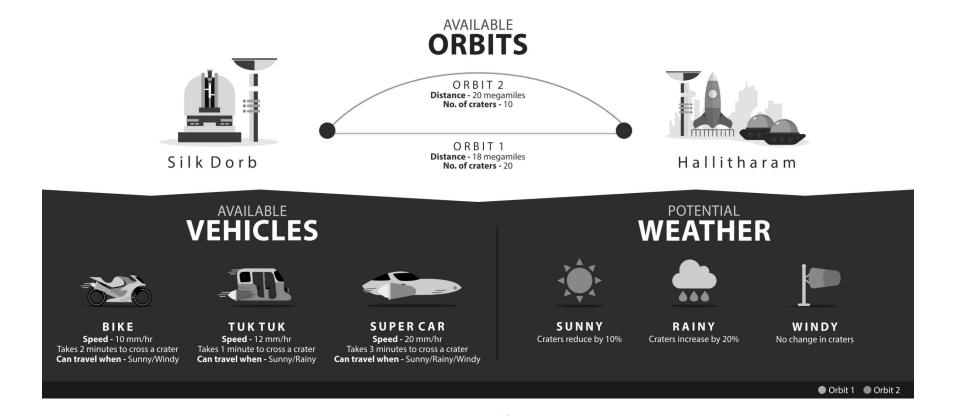
Our problem is set in the traffic snarls of planet Lengaburu. After the recent Falicornian war, victorious King Shan of Lengaburu wishes to tour his kingdom. But the traffic in Lengaburu is killing. You should see how Silk Dorb gets jammed in the evening!

Write code to help King Shan navigate Lengaburu's traffic.



## Problem: mission impossible

King Shan wants to visit the suburb of Hallitharam, and has 2 possible orbits and 3 possible vehicles to choose from. Your coding challenge is to determine which orbit and vehicle King Shan should take to reach Hallitharam the fastest.



## Travel options

#### **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):

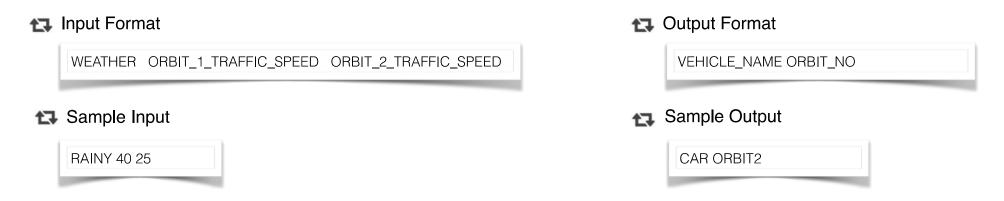
**Sunny** - craters reduce by 10%. Car, bike and tuktuk can be used in this weather.

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

Your program should take the location to the test file as parameter. Input needs to be read from a text file, and output should be printed to the console.



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.

More sample input output scenarios.

**Please stick to the Sample input output format as shown**. This is very important as we are automating the correctness of the solution to give you a faster evaluation. You can find some sample input output files <u>here</u>.

