# Part 1 - Questions

* How would you keep more junior members of the team motivated in their work?
* How would you weigh up execution vs mentoring when you are in a busy environment (i.e. you doing work vs you helping others)?
* Given a large project, what would be your methodology for breaking it down into smaller steps, and distributing the work to the rest of the team?
* What qualities/skills would you look for if interviewing for a more junior member of the team?
* What keeps you up at night as an engineer?

# Part 2 - Technical Test

**Note that the polygons are in GeoJSON NOT shape file format**

In node.js / express - build a service/app that can take in a location search string (e.g. 'EC1R5DF' or 'White Bear Yard'), call a location provider (for example Google Maps) to get a lat/lng, and then use the shape file provided to get a 'service area' identifier (e.g. LONCENTRAL). You may assume the shape file is stored on disk next to the app or fetched on starting the service as you prefer.

The output for found locations should look something like this for 'EC1R5DF'. the location object should contain as much information as you believe to be useful to the presentation layer. Minimum requirement is lat, lng, serviceArea, postcode

{

“status” :”OK”,

“search”: “EC1R5DF”,

“location”: {

“addressNumber”: “2nd Floor, White Bear Yard”, // can be null / not present if not known

“addressStreet”: “144a Clerkenwell Road”, // can be null / not present if not known

“city”: “London”, // can be null / not present if not known

“postcode”: “EC1R5DF”,

“lat”: 0.0000,

“lng”: 0.0000,

“serviceArea”: “LONCENTRAL”

}

}

The output should look something like this for 'ASDFG' (location not found)

{

“status”: “NOT\_FOUND”,

“search”: “ASDFG”

}

**Please also consider the following:**

* We use Typescript as our core server-side language. If you are able to write the system using Typescript it would be preferable by far.
* Add caching + expiry for the service area lookup, the call to location provider or both as you feel most appropriate.
* Factor in the future potential need to support multiple location search providers (e.g. if the first one doesn’t work/find results due to new addresses)