Dear candidate,

Please find the exercise below.

The time for completion is 2-3 hours.

It is not expected you will finish all the bonus points.

Only attempt those you are comfortable with within the time frame.

The exercise description:

As a base please use a solution from the attachment it is VS2019 (VS2021,VS2022 are fine too) C# self-hosted web API server (dotnet core, Kestrel) listening on port 9091

There is gwpByCountry.csv file with data in the Data folder.

* Create a "CountryGwp" controller
  + Create endpoint listening for POST requests(application/json) at route <http://localhost:9091/api/gwp/avg>.
  + The input should be of the following format:

{  
 "country": "ae",  
 "lob": ["property", "transport"]  
 }

* + The output should look like this:

{  
 "transport": 446001906.1,  
 "liability": 634545022.9  
 }

* Accompany your solution with a brief description of how it should be run/tested (the application must be able to compile and run!)
* Push it to a public repository in github/bitbucket and send us the link.

Bonus points for:

• Implement the calls asynchronously  
• Follow SOLID principles when designing the Client API, especially the use of DI/IoC  
• Create a unit or E2E test to run and test the data extraction code using framework of your choice, e.g. NUnit  
• Add some basic error handling

Notes

• The aim of the exercise is to understand your proficiency with the .net framework and your coding style not the numerical accuracy of the results.  
• For storage of your models, you can either mock up a database class in and load the csv's on start-up in memory (recommended) or use sql server.

Good Luck!