Test - C#

The assignment

- Provide 2 HTTP endpoints that accepts base64-encoded JSON of following format

```
1  {"input":"some value to be compared"}
```

  - `<host>/v1/diff/<ID>/left`
    - example: curl -X POST "`<host>/v1/diff/<ID>/left`" -H "accept: */*" -H "Content-Type: application/custom" -d "\"eyJpbnB1dCI6InRlc3RWYWx1ZSJ9\""
  - `<host>/v1/diff/<ID>/right`
    - example: curl -X POST "`<host>/v1/diff/<ID>/right`" -H "accept: */*" -H "Content-Type: application/custom" -d "\"eyJpbnB1dCI6InRlc3RWYWx1ZSJ9\""
- The provided JSON data needs to be diff-ed and the results shall be available on a third end point
  - `<host>/v1/diff/<ID>`
- The results shall provide the following info in JSON format (structure is up to you)
  - If value of the "input" property of diffed JSONs is equal, just return that information saying "inputs were equal". No need to return compared values.
  - If value of the "input" property of diffed JSONs is not of equal size, just return that information "inputs are of different size". No need to return compared values.
  - If value of the "input" property of diffed JSONs has the same size, perform a simple diff - return offsets (in both values of the "input" property) and lengths (in both values of the "input" property) of the differences.

Must haves

- Solution written in C# - strongly preferred is to use .NET CORE (NET 6.0)
- Provide a test client (can be command line, integration test …..) to call the API
- Documentation in code
- Describe limitations of the solution

Nice to haves

- Suggestions for improvement at top of the must have requirements or even better implement the suggested improvements in the code
- Unit tests for internal logic

Deliverables

- Upload your solution to your github / similar public source code system and provide us with access to it.

Notes

- We want to see how you are programming, so make it nice. Not just as some quick solution.
- No copy-pasting of any possible solutions from the Internet.