

# Test - C#

## The assignment

- Provide 2 HTTP endpoints that accepts base64-encoded JSON
  - `<host>/v1/diff/<ID>/left`
    - example: `curl -X POST "<host>/v1/diff/<ID>/left" -H "accept: */*" -H "Content-Type: application/json" -d "\"eyJpbmBldCI6InRlc3RlYXNlZSJ9\""`
  - `<host>/v1/diff/<ID>/right`
    - example: `curl -X POST "<host>/v1/diff/<ID>/right" -H "accept: */*" -H "Content-Type: application/json" -d "\"eyJpbmBldCI6InRlc3RlYXNlZSJ9\""`
- The provided 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
  - If inputs are equal, just return that information saying "inputs were equal" (in JSON format of choice). No need to return the input.
  - If inputs are not of equal size, just return that information "inputs are of different size" (in JSON of choice). No need to return the input.
  - If inputs has the same size, perform a simple diff - return offsets (in both inputs) and lengths (in both inputs) of the differences.
- Make assumptions in the implementation explicit

## Must haves

- Solution written in C#
- Provide a test client (can be command line, WPF, WebForms, MVC, WinForms, integration test or anything else) to call the API
- Documentation in code
- Describe limitations of the solution

## Nice to haves

- Suggestions for improvement
- Unit tests for internal logic

## Deliverables

- ZIP source code of Visual Studio solution
- Do not include unnecessary files in the ZIP file (include just what you'd include in GIT repository)

## 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.