C# Coding Task

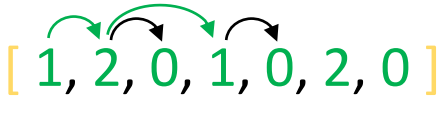
Goal

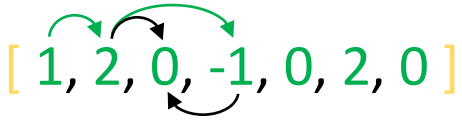
Determine if you can reach the last element on a positive/negative numbers array, according to these rules:

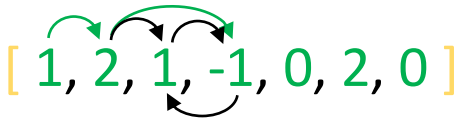
1. You start at the first element.
2. Current element value indicates how many steps you can take at most.
    a. Example: if the value is 3 then you can take 0, 1, 2 or 3 steps;
    b. Example: if the value is 0 then you stuck – the end.

Winnable Example:

Not winnable example:







Part 1

Write an application that would:

1. Accept array of digits as input;
2. Determine is the goal is reachable;
3. Provide most efficient path.

Part 2

1. The application should be written using C#.
2. Source code should be provided in Source control of your taste.

Additional requirements for application for your choice which brings more credits:

1. Ensure that your implementation actually works :) in some automated style.
2. Application store all arrays and results into some storage. Might be permanent one. And later on user can ask to show them as a list or individually.
3. Application can accept a batch of arrays and process them all. And it would able to NOT process already processed arrays (in the storage) and use already calculated results.
4. Application is actually a HTTP endpoint which can be used by another system or Web UI.
5. Errors needs to be handled i.e. error internals should not to be exposed to the end user.
6. Use AI to predict atoms colliding probability… Just joking :)