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# A Two pointers

Report Issue (<https://github.com/LeetCode-Feedback/LeetCode-Feedback/issues>)

The format of this article is the format that many articles in this course will take. We will introduce ideas, and then walk through example problems to demonstrate the ideas. These walkthrough problems are not meant to be solved by you.

Two pointers is an extremely common technique used to solve array and string problems. It involves having two integer variables that both move along an iterable. In this article, we are focusing on arrays and strings. This means we will have two integers, usually named something like `i` and `j`, or `left` and `right` which each represent an index of the array or string.

There are several ways to implement two pointers. To start, let's look at the following method:

Start the pointers at the edges of the input. Move them towards each other until they meet.

Converting this idea into instructions:

1. Start one pointer at the first index `0` and the other pointer at the last index `input.length - 1`.
2. Use a while loop until the pointers are equal to each other.
3. At each iteration of the loop, move the pointers towards each other. This means either increment the pointer that started at the first index, decrement the pointer that started at the last index, or both.

Deciding which pointers to move will depend on the problem we are trying to solve.

Here's some pseudocode illustrating the concept: