

# Reverse An Array

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🔧 difficulty	Easy
🏷️ tags	Vector
💻 language	C++
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🔗 link	<a href="https://www.geeksforgeeks.org/problems/reverse-an-array/1">https://www.geeksforgeeks.org/problems/reverse-an-array/1</a>
✅ Completion	✔️

## Intuition

The problem requires reversing an array, which is a common operation in programming. Using built-in functions simplifies implementation, ensures correctness, and improves readability.

## Approach

1. Utilize the `reverse` function from the C++ Standard Library to reverse the array in-place.
2. The `reverse` function operates on a range, defined by iterators, and swaps elements iteratively to achieve the reversal.
3. This approach is efficient and concise, leveraging the STL's well-optimized functionality.

## Complexity

### Time Complexity:

- **$O(n)$** : The `reverse` function iterates through half the array, swapping elements at opposite ends. Thus, the complexity is proportional to the size of the array,  $n$ .

### Space Complexity:

- **$O(1)$** : The operation is performed in-place, requiring no additional memory.

## Code

```
class Solution {
public:
    void reverseArray(vector<int> &arr) {
        reverse(arr.begin(), arr.end());
    }
};
```