AI Assistance Documentation (ChatGPT)

# 1. Find Missing Numbers in Array

Prompt Used:

What is an optimal way to solve problem 1 (1. Find Missing Numbers in Array) in C# with edge cases?

Response Received:

ChatGPT explained the optimal algorithm to solve the problem along with its time and space complexity. It also provided a sample implementation in C#.

Implementation Details:

The solution was implemented based on ChatGPT’s suggestions. Minor adjustments were made to match the function signature and structure required by the assignment template.

Adjustments:

Added try-catch blocks as required by the assignment’s code template. Edge cases were reviewed and handled explicitly in the implementation.

# 2. Sort Array by Parity

Prompt Used:

What is an optimal way to solve problem 2 (2. Sort Array by Parity) in C# with edge cases?

Response Received:

ChatGPT explained the optimal algorithm to solve the problem along with its time and space complexity. It also provided a sample implementation in C#.

Implementation Details:

The solution was implemented based on ChatGPT’s suggestions. Minor adjustments were made to match the function signature and structure required by the assignment template.

Adjustments:

Added try-catch blocks as required by the assignment’s code template. Edge cases were reviewed and handled explicitly in the implementation.

# 3. Two Sum

Prompt Used:

What is an optimal way to solve problem 3 (3. Two Sum) in C# with edge cases?

Response Received:

ChatGPT explained the optimal algorithm to solve the problem along with its time and space complexity. It also provided a sample implementation in C#.

Implementation Details:

The solution was implemented based on ChatGPT’s suggestions. Minor adjustments were made to match the function signature and structure required by the assignment template.

Adjustments:

Added try-catch blocks as required by the assignment’s code template. Edge cases were reviewed and handled explicitly in the implementation.

# 4. Find Maximum Product of Three Numbers

Prompt Used:

What is an optimal way to solve problem 4 (4. Find Maximum Product of Three Numbers) in C# with edge cases?

Response Received:

ChatGPT explained the optimal algorithm to solve the problem along with its time and space complexity. It also provided a sample implementation in C#.

Implementation Details:

The solution was implemented based on ChatGPT’s suggestions. Minor adjustments were made to match the function signature and structure required by the assignment template.

Adjustments:

Added try-catch blocks as required by the assignment’s code template. Edge cases were reviewed and handled explicitly in the implementation.

# 5. Decimal to Binary Conversion

Prompt Used:

What is an optimal way to solve problem 5 (5. Decimal to Binary Conversion) in C# with edge cases?

Response Received:

ChatGPT explained the optimal algorithm to solve the problem along with its time and space complexity. It also provided a sample implementation in C#.

Implementation Details:

The solution was implemented based on ChatGPT’s suggestions. Minor adjustments were made to match the function signature and structure required by the assignment template.

Adjustments:

Added try-catch blocks as required by the assignment’s code template. Edge cases were reviewed and handled explicitly in the implementation.

# 6. Find Minimum in Rotated Sorted Array

Prompt Used:

What is an optimal way to solve problem 6 (6. Find Minimum in Rotated Sorted Array) in C# with edge cases?

Response Received:

ChatGPT explained the optimal algorithm to solve the problem along with its time and space complexity. It also provided a sample implementation in C#.

Implementation Details:

The solution was implemented based on ChatGPT’s suggestions. Minor adjustments were made to match the function signature and structure required by the assignment template.

Adjustments:

Added try-catch blocks as required by the assignment’s code template. Edge cases were reviewed and handled explicitly in the implementation.

# 7. Palindrome Number

Prompt Used:

What is an optimal way to solve problem 7 (7. Palindrome Number) in C# with edge cases?

Response Received:

ChatGPT explained the optimal algorithm to solve the problem along with its time and space complexity. It also provided a sample implementation in C#.

Implementation Details:

The solution was implemented based on ChatGPT’s suggestions. Minor adjustments were made to match the function signature and structure required by the assignment template.

Adjustments:

Added try-catch blocks as required by the assignment’s code template. Edge cases were reviewed and handled explicitly in the implementation.

# 8. Fibonacci Number

Prompt Used:

What is an optimal way to solve problem 8 (8. Fibonacci Number) in C# with edge cases?

Response Received:

ChatGPT explained the optimal algorithm to solve the problem along with its time and space complexity. It also provided a sample implementation in C#.

Implementation Details:

The solution was implemented based on ChatGPT’s suggestions. Minor adjustments were made to match the function signature and structure required by the assignment template.

Adjustments:

Added try-catch blocks as required by the assignment’s code template. Edge cases were reviewed and handled explicitly in the implementation.