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Title

Sorting Odd Numbers in Ascending Order

Question No : 1 / 1

Problem Statement

Write the solution within the **Program.cs** file.
All the classes must be in public.

You are tasked with writing a program in **C#** that sorts all the odd numbers in a list of integers.

Sorting Criteria

- Odd numbers should be sorted in **ascending order**

Your Program Should

1. Accept a dynamic number of integers as input separated by spaces
2. Sort the integers according to the specified criteria
3. Output the sorted list of integers

Classes

Program

The main class containing the application logic.

Methods

Main Method

```
static void Main(string[] args)
```

- Reads input from the console
- Processes the input to extract and sort odd numbers
- Outputs the sorted list of odd numbers

ParseIntegers Method

```
private static List<int> ParseIntegers(string input)
```

- Splits the input string into tokens
- Attempts to parse each token into an integer
- Returns a list of successfully parsed integers

GetOddNumbers Method

```
private static List<int> GetOddNumbers(List<int> numbers)
```

- Filters out the odd numbers from the list
- Sorts them in ascending order
- Returns the sorted list of odd numbers

Input Format

- A single line containing space-separated integers

Output Format

- Displays the sorted odd numbers in ascending order separated by spaces

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Test Cases

Test Case 1

Input

```
5 2 9 10 6 3
```

Expected Output

```
3 5 9
```

Test Case 2

Input

```
8 4 2 10
```

Expected Output

```
(no output)
```

Test Case 3

Input

```
11 7 3 9 1
```

Expected Output

```
1 3 7 9 11
```

Test Case 4

Input

```
15 abc 4 7 xyz 2
```

Expected Output

```
7 15
```

Test Case 5

Input

```
1
```

Expected Output

```
1
```

Commands to Run the Project

```
cd dotnetapp
dotnet run
dotnet build
dotnet clean
```

Note

- Only valid integers are considered
- Non-numeric values are ignored
- Even numbers are excluded from output

```
using System;
using System.Collections.Generic;

public class Program
{
    private static List<int> ParseIntegers(string input)
    {
        List<int> result = new List<int>();

        if (string.IsNullOrWhiteSpace(input))
            return result;

        string[] tokens = input.Split(' ');

        foreach (string token in tokens)
        {
            if (int.TryParse(token, out int value))
            {
                result.Add(value);
            }
        }
        return result;
    }

    private static List<int> GetOddNumbers(List<int> numbers)
    {
        List<int> oddNumbers = new List<int>();
        foreach (int num in numbers)
        {
            if (num % 2 != 0)
            {
                oddNumbers.Add(num);
            }
        }
        oddNumbers.Sort();
```

```
        return oddNumbers;
    }
    public static void Main()
    {
        string input = Console.ReadLine();
        List<int> numbers = ParseIntegers(input);
        List<int> oddNumbers = GetOddNumbers(numbers);
        if (oddNumbers.Count > 0)
        {
            Console.WriteLine(string.Join(" ", oddNumbers));
        }
    }
}
```