```
0 references
internal class Program
{
    0 references
    static void Main(string[] args)
    {
        Console.WriteLine("the number of elments");
        int n = int.Parse(Console.ReadLine());

        int[] values = new int[n];
        for (int i = 0; i < n; i++)
        {
            values[i] = int.Parse(Console.ReadLine());
        }
        int median = (n % 2 == 0) ? (values[n / 2] + values[n / 2 - 1]) / 2 : values[n / 2];
        Console.WriteLine("The median is {0}", median);
        int mode = values[0];
        int count = 1;
        for (int i = 1; i < n; i++)
        {
            if (values[i] == mode)
            {
                count++;
            }
            else if (count > 1)
            {
                mode = values[i];
                count = 1;
            }
        }
        Console.WriteLine("The mode is {0}", mode);
        int min = values[0];
        int max = values[0];
        for (int i = 1; i < n; i++)
        {
            if (values[i] < min)
            {
                min = values[i];
            }
            if (values[i] > max)
            {
                max = values[i];
            }
        }
```

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int range = max - min;
Console.WriteLine("The range is {0}", range);
int firstQuartile = (n % 2 == 0) ? (values[n / 4] + values[n / 4 - 1]) / 2 : values[n / 4];
Console.WriteLine("The first Quartile is {0}", firstQuartile);
int thirdQuartile = (n % 2 == 0) ? (values[3 * n / 4] + values[3 * n / 4 - 1]) / 2 : values[3 * n / 4];
Console.WriteLine("The third Quartile is {0}", thirdQuartile);
int p90 = (n % 2 == 0) ? (values[9 * n / 10] + values[9 * n / 10 - 1]) / 2 : values[9 * n / 10];
Console.WriteLine("The P90 is {0}", p90);
int interquartileRange = thirdQuartile - firstQuartile;
Console.WriteLine("The interquartile range is {0}", interquartileRange);
double lowerOutlierBoundary = firstQuartile - 1.5 * interquartileRange;
double upperOutlierBoundary = thirdQuartile + 1.5 * interquartileRange;
Console.WriteLine("The boundaries of the outlier region are {0} and {1}", lowerOutlierBoundary, upperOutlierBoundary);
int input = int.Parse(Console.ReadLine());
if (input < lowerOutlierBoundary || input > upperOutlierBoundary)
{
    Console.WriteLine("The value is an outlier.");
}
else
{
    Console.WriteLine("The value is not an outlier.");
}
```

C:\WINDOWS\system32\cmd.exe

```
the number of elments
4
23
54
97
32
The median is 75
The mode is 23
The range is 74
The first Quartile is 38
The third Quartile is 64
The P90 is 64
The interquartile range is 26
The boundaries of the outlier region are -1 and 103
103
The value is not an outlier.
Press any key to continue . . .
```