

E - (GFG) Find minimum and maximum element in an array

Given an array A of size N of integers. Your task is to find the minimum and maximum elements in the array.

Example 1:

Input:

N = 6

A[] = {3, 2, 1, 56, 10000, 167}

Output: 1 10000

Explanation: minimum and maximum elements of array are 1 and 10000.

Example 2:

Input:

N = 5

A[] = {1, 345, 234, 21, 56789}

Output: 1 56789

Explanation: minimum and maximum element of array are 1 and 56789.

Your Task:

You don't need to read input or print anything. Your task is to complete the function `getMinMax()` which takes the array A[] and its size N as inputs and returns the minimum and maximum element of the array.

Expected Time Complexity: $O(N)$

Expected Auxiliary Space: $O(1)$

Constraints:

$1 \leq N \leq 105$

$1 \leq A_i \leq 10^{12}$

Solution:

```
class Compute
{
    static Pair getMinMax(long a[], long n)
    {
        long minValue=a[0];
        long maxValue=a[0];
        for( int i=0 ;i<n; i++ ){
            If( minValue > a[i] )
                minValue = a[i];
            if( maxValue < a[i] )
                maxValue = a[i];
        }
        return new Pair(minValue,maxValue);
    }
}
```