Description | Accepted | Editorial | Solutions | Submissions

933. Number of Recent Calls

Solved

Easy | Topics | Companies

You have a `RecentCounter` class which counts the number of recent requests within a certain time frame.

Implement the `RecentCounter` class:

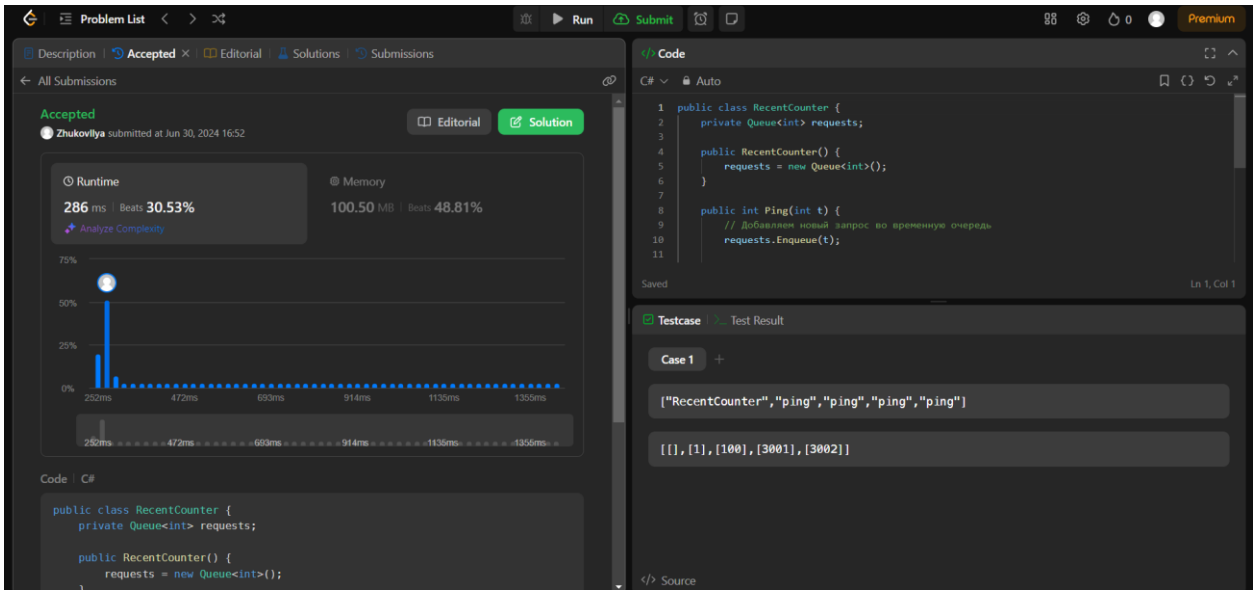
- `RecentCounter()` Initializes the counter with zero recent requests.
- `int ping(int t)` Adds a new request at time `t`, where `t` represents some time in milliseconds, and returns the number of requests that has happened in the past `3000` milliseconds (including the new request). Specifically, return the number of requests that have happened in the inclusive range `[t - 3000, t]`.

It is **guaranteed** that every call to `ping` uses a strictly larger value of `t` than the previous call.

Example 1:

Input
```
["RecentCounter", "ping", "ping", "ping", "ping"]
[[], [1], [100], [3001], [3002]]
```
Output
```
[null, 1, 2, 3, 3]
```

Explanation
```
RecentCounter recentCounter = new RecentCounter();
recentCounter.ping(1);     // requests = [1], range is [-2999,1], return 1
```



Код:

```
using System.Collections.Generic;

public class RecentCounter
{
    private Queue<int> requests;
```

```
    public RecentCounter()
    {
        requests = new Queue<int>();
    }

    public int Ping(int t)
    {
        // Добавляем новый запрос во временную очередь
        requests.Enqueue(t);

        // Удаляем все запросы, которые не попадают в интервал [t - 3000, t]
        while (requests.Count > 0 && requests.Peek() < t - 3000)
        {
            requests.Dequeue();
        }

        // Возвращаем количество запросов в интервале
        return requests.Count;
    }
}
```