

Day 80 coding Statement :

Alice and Bob went to a pet store. There are N animals in the store where the i th animal is of type A_i ?

Alice decides to buy some of these N animals. Bob decides that he will buy **all** the animals **left** in the store after Alice has made the purchase.

Find out whether it is possible that Alice and Bob end up with **exactly same multiset** of animals.

Input Format

- The first line of input will contain a single integer T , denoting the number of test cases.
- Each test case consists of multiple lines of input.
 - The first line of each test case contains an integer N — the number of animals in the store.
 - The next line contains N space separated integers, denoting the type of each animal.

Output Format

For each test case, output on a new line, YES, if it is possible that Alice and Bob end up with **exactly same** multiset of animals and NO otherwise.

You may print each character in uppercase or lowercase. For example, the strings YES, yes, Yes, and yES are considered identical.

Sample Input

4

3

4 4 4

4

2 3 3 2

4

1 2 2 3

6

5 5 1 5 1 5

Sample Output

NO

YES

NO

YES

```
import java.util.*;
import java.util.ArrayList;
import java.io.*;

class TestClass {
    static class FastReader {
        BufferedReader br;
        StringTokenizer st;

        public FastReader() {
            br = new BufferedReader(new InputStreamReader(System.in));
        }

        String next() {
            while (st == null || !st.hasMoreElements()) {
                try {
                    st = new StringTokenizer(br.readLine());
                } catch (IOException e) {
                    e.printStackTrace();
                }
            }
            return st.nextToken();
        }

        int nextInt() {
            return Integer.parseInt(next());
        }

        long nextLong() {
            return Long.parseLong(next());
        }

        double nextDouble() {
            return Double.parseDouble(next());
        }
    }
}
```

```

    }

    double nextFloat() {
        return Float.parseFloat(next());
    }

    String nextLine() {
        String str = "";
        try {
            str = br.readLine();
        } catch (IOException e) {
            e.printStackTrace();
        }
        return str;
    }
}

public static void main(String[] sadf) {
    FastReader fr = new FastReader();
    int t = fr.nextInt();
    while (t-- > 0) {
        solve(fr);
    }
}

public static void solve(FastReader fr) {
    int n = fr.nextInt();
    HashMap<Integer, Integer> map = new HashMap<Integer, Integer>();
    for (int i = 0; i < n; i++) {
        int num = fr.nextInt();
        map.put(num, map.getDefault(num, 0) + 1);
    }
    for (Map.Entry<Integer, Integer> e : map.entrySet()) {
        if (e.getValue() % 2 != 0) {
            System.out.println("NO");
            return;
        }
    }
    System.out.println("YES");
}

private static int log(int N) {
    return 31 - Integer.numberOfLeadingZeros(N);
}
}

```