

Input Format

The first line contains an Integer n , the number of items in arr .
Each of the next n lines contains an Integer $arr[i]$ where $0 \leq i < n$.

Constraints

$100 \leq n \leq 10^6$
 $0 \leq arr[i] < 100$

Sample Input

```
100
63 25 73 1 98 73 56 84 86 57 16 83 8 25 81 56 9 53 98 67 99 12 83 89 80 91 39 86 76 85 74 39 25 90 59 10 94 32 44 3 89 5
```

Sample Output

```
0 2 0 2 0 0 1 0 1 2 1 0 1 1 0 0 2 0 1 0 1 2 1 1 1 3 0 2 0 0 2 0 3 3 1 0 0 0 0 2 2 1 1 1 2 0 2 0 1 0 1 0 0 1 0 0 2 1 0 1
```

Explanation

Each of the resulting values $result[i]$ represents the number of times i appeared in arr .