Duplicate

Problem Statement

You will be given an array **A** of size **N**. Print "**YES**" if there is any duplicate value in the array, "**NO**" otherwise.

Input Format

- First line will contain **N**.
- Second line will contain the array **A**.

Constraints

1. 1 <= **N** <= 100000
2. 0 <= **A[i]** <= 10^9; Where 0 <= **i** < N

Output Format

- Output "**YES**" or "**NO**" without the quotation marks according to the problem statement.

Sample Input 0

```
5
1 2 3 4 5
```

Sample Output 0

```
NO
```

Sample Input 1

```
6
2 1 3 5 2 1
```

Sample Output 1

```
YES
```

Get Prefix Sum

Problem Statement

You will be given an integer array **A** of size **N**. You need to print the prefix sum array of the array **A** in reverse order.

Input Format

- First line will contain **N**.
- Next line of contain the array **A**.

Constraints

1. 1 <= **N** <= 10^5
2. 1 <= **A[i]** <= 10^9; Where 0 <= **i** < N

Output Format

- Output the prefix sum array in reverse order.

Sample Input 0

```
5

2 4 1 5 3
```

Sample Output 0

```
15 12 7 6 2
```

Explanation 0

The prefix sum of the given array is: 2 6 7 12 15.

The reverse order is: 15 12 7 6 2.

Sample Input 1

```
3

1000000000 1000000000 1000000000
```

Sample Output 1

```
3000000000 2000000000 1000000000
```

Sorted

Problem Statement

You will given an array **A** of size **N**. You need to tell if the array is already sorted or not.

If the array is sorted in **ascending** order print "**YES**", otherwise print "**NO**".

Input Format

- First line will contain **T**, the number of test cases.
- The first line of each test case will contain **N**.
- The second line of each test case will contain the array **A**.

Constraints

1. 1 <= **T** <= 1000
2. 1 <= **N** <= 1000
3. 0 <= **A[i]** <= 1000; Where 0 <= **i** < N

Output Format

- Output "**YES**" or "**NO**" without the quotation marks according to the problem statement.

Sample Input 0

```
3
5
2 4 6 7 10
8
1 100 101 120 120 121 1000 1000
4
100 1 102 12
```

Sample Output 0

```
YES
YES

NO
```

Insert it

Problem Statement

You will given an integer array **A** of size **N** and another array **B** of size **M**. Also you will be given an index **X**. You need to insert the whole array **B** to the index **X** of array **A**.

Input Format

- First line will contain **N**.
- Second line will contain array **A**.
- Third line will contain **M**.
- Fourth line will contain array **B**.
- The last line will contain **X**.

Constraints

1. 1 <= **N, M** <= 10^3
2. 1 <= **A[i], B[j]** <= 10^3; Where 0 <= **i** < N and 0 <= **j** < M
3. 0 <= **X** <= N

Output Format

- Output the final array **A**.

Sample Input 0

```
5
2 3 4 5 6
3
10 20 30
3
```

Sample Output 0

```
2 3 4 10 20 30 5 6
```

Sample Input 1

```
5
2 3 4 5 6
3
10 20 30
0
```

Sample Output 1

```
10 20 30 2 3 4 5 6
```

Sample Input 2

```
4
3 4 5 6
3
10 20 30
4
```

Sample Output 2

```
3 4 5 6 10 20 30
```

Printing X

Problem Statement

You will be given an positive **odd** integer **N**, you need to print the pattern for it. See sample input and output for understanding the pattern.

Input Format

- Input will contain only **N**.

Constraints

1. 1 <= **N** <= 20 and N is odd.

Output Format

- Output the pattern.

Sample Input 0

```
5
```

Sample Output 0

```
\   /
 \ /
  X
 / \
/   \
```

Sample Input 1

```
7
```

Sample Output 1

```
\     /
 \   /
  \ /
   X
  / \
 /   \
/     \
```

Sample Input 2

```
3
```

Sample Output 2

```
\ /
 X
/ \
```

Sample Input 3

```
1
```

Sample Output 3

```
X
```