A. Favorite Sequence

time limit per test: 2 seconds
memory limit per test: 256 megabytes

Polycarp has a favorite sequence $a[1 \ldots n]$ consisting of n integers. He wrote it out on the whiteboard as follows:

- he wrote the number a_1 to the left side (at the beginning of the whiteboard);
- he wrote the number a_2 to the right side (at the end of the whiteboard);
- then as far to the left as possible (but to the right from a_1), he wrote the number a_3;
- then as far to the right as possible (but to the left from a_2), he wrote the number a_4;
- Polycarp continued to act as well, until he wrote out the entire sequence on the whiteboard.

The beginning of the result looks like this (of course, if $n \geq 4$).

For example, if $n = 7$ and $a = [3, 1, 4, 1, 5, 9, 2]$, then Polycarp will write a sequence on the whiteboard $[3, 4, 5, 2, 9, 1, 1]$.

You saw the sequence written on the whiteboard and now you want to restore Polycarp's favorite sequence.

Input

The first line contains a single positive integer t ($1 \leq t \leq 300$) — the number of test cases in the test. Then t test cases follow.

The first line of each test case contains an integer n ($1 \leq n \leq 300$) — the length of the sequence written on the whiteboard.

The next line contains n integers $b_1, b_2, \ldots, b_n$ ($1 \leq b_i \leq 10^9$) — the sequence written on the whiteboard.

Output

Output t answers to the test cases. Each answer — is a sequence a that Polycarp wrote out on the whiteboard.

Example

input Copy

```
6
7
3 4 5 2 9 1 1
4
9 2 7 1
11
8 4 3 1 2 7 8 7 9 4 2
1
42
2
11 7
8
1 1 1 1 1 1 1 1
```

output Copy

```
3 1 4 1 5 9 2
9 1 2 7
8 2 4 4 3 9 1 7 2 8 7
42
11 7
1 1 1 1 1 1 1 1
```

Note

In the first test case, the sequence a matches the sequence from the statement. The whiteboard states after each step look like this:

$[3] \Rightarrow [3, 1] \Rightarrow [3, 4, 1] \Rightarrow [3, 4, 1, 1] \Rightarrow [3, 4, 5, 1, 1] \Rightarrow [3, 4, 5, 9, 1, 1] \Rightarrow [3, 4, 5, 2, 9, 1, 1]$.