LIS Triangle

Input file:	`standard input`
Output file:	`standard output`
Time limit:	2 seconds
Memory limit:	1024 megabytes

You are given three positive integers N, K, and L. Your task is to determine whether there exists an integer sequence P of length N that satisfies all of the following conditions. If such a sequence exists, output one such sequence.

- P is a permutation of the sequence $(K, K+1, \ldots, K+N-1)$.

- The length of the longest increasing subsequence* of P is exactly L.

- For every integer i such that $1 \le i \le N-2$, there exists a non-degenerate triangle† with side lengths P_i, P_{i+1}, and P_{i+2}.

You are given T test cases. Answer each test case separately.

Input

The input is given in the following format:

```
T
case₁
case₂
⋮
case_T
```

T
case$_1$
case$_2$
$\vdots$
case$_T$

Each test case is given in the following format:

```
N K L
```

- All input values are integers.

- $1 \le T \le 50000$.

- $3 \le N \le 2 \times 10^5$.

- $1 \le K \le 2 \times 10^5$.

- $1 \le L \le N$.

- Over all test cases in a single input, the sum of N is at most 2×10^5.

Output

If there is no sequence P that satisfies all the conditions, output:

```
No
```

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*A **subsequence** of a sequence P is a sequence formed by removing zero or more elements from P without changing the order of the remaining elements. A **longest increasing subsequence** of P is a strictly increasing subsequence of P that has the maximum possible length.

†A non-degenerate triangle is a triangle whose three vertices do not lie on the same straight line.

Otherwise, output:

Yes
P_1 P_2 ... P_N

Any valid sequence P that satisfies all conditions is accepted.

Example

standard input	standard output
3 6 3 4 5 5 5 7 1 2	Yes 3 6 4 7 5 8 Yes 5 6 7 8 9 No

Note

In the first example, one valid sequence is $P = (3, 6, 4, 7, 5, 8)$. Other valid sequences may also exist.

In the second example, the only valid sequence is $P = (5, 6, 7, 8, 9)$.

In the third example, no sequence P satisfies all the conditions.