Problem N. Red Black Grid

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	256 megabytes

Given integers N and K, construct an $N \times N$ grid, each of whose cells is colored either red or black, such that there are exactly K unordered pairs of oppositely colored adjacent cells, or claim that no such grid exists.

A pair of cells is called adjacent if they share an edge. Formally, let the rows be numbered $1, 2, \cdots N$ from left to right and the columns be numbered $1, 2, \cdots N$ from top to bottom. The cell (i, j) denotes the cell with row number i and column number j. Two cells (a, b) and (c, d) are adjacent iff $|c - a| + |d - b| = 1$.

If there are multiple valid grids, you can output any of them.

Input

The first line contains T, the number of testcases. Then, the testcases follow.

Each testcase consists of two space separated integers N and K.

Constraints

- $1 \le T \le 10^4$
- $1 \le N \le 10^3$
- $0 \le K \le 2 \times N \times (N - 1)$
- The sum of N^2 over all testcases doesn't exceed 10^6.

Output

For each testcase, if no valid grid exists, print `Impossible` on a new line.

Else print $N + 1$ lines. Print `Possible` on the first line. Then, print N lines, the $i - th$ of which contains the $i - th$ row of the grid. For each cell of the row from left to right, if it is colored red, print R and if it is colored black, print B.

Example

standard input	standard output
2 3 6 3 1	Possible BRB RBB BBB Impossible

Note

In the first testcase, the pairs of adjacent oppositely colored cells are:

- $(1, 1)$ and $(2, 1)$
- $(1, 2)$ and $(1, 3)$
- $(1, 2)$ and $(2, 2)$

- $(2, 1)$ and $(3, 1)$
- $(2, 2)$ and $(3, 2)$
- $(2, 3)$ and $(3, 3)$