Problem C. Word Search

Small input 10 points	Solve C-small
Large input 15 points	Solve C-large

Problem

In honor of Google I/O 2017, we would like to make an I/O-themed word search grid. This will be a rectangular grid in which every cell contains one of the three characters `I`, `/`, or `0`. The people solving our word search will look for all instances of the string `I/0` that appear contiguously forwards or backwards in a row, column, or diagonal. For example, the following grid contains eight instances of `I/0`, representing all eight possible directions in which the string can appear:

```
00000
0///0
0/I/0
0///0
00000
```

To control the difficulty level of our word search, we would like the string to appear *exactly* **N** times in the grid. Moreover, we do not want the grid to be too large; it cannot have more than **D** rows or more than **D** columns.

Can you help us design a grid that meets these specifications?

Input

The first line of the input gives the number of test cases, **T**. **T** test cases follow. Each test case consists of one line with two integers **D** and **N**, as described above.

Output

For each test case, first output one line containing `Case #x:`. Then output R lines of exactly C characters each, representing the rectangular grid. Each of those characters must be either `I`, `/`, or `0`. You may choose any values of R and C as long as both are at least 1 and neither exceeds **D**. Your grid must contain *exactly* **N** instances of the string `I/0`, per the rules described in the statement.

If there are multiple valid answers, you may output any of them.

Limits

$0 \leq \mathbf{N} \leq 287$.
It is guaranteed that at least one valid grid exists for each test case.

Small dataset

$1 \leq \mathbf{T} \leq 25$.
$\mathbf{D} = 50$.

Large dataset

$1 \leq \mathbf{T} \leq 100$.
$\mathbf{D} = 15$.

Sample

Input	Output
4 50 1 50 0 50 3 50 8	Case #1: 0 / I Case #2: IO Case #3: III000 /I/0/0 III000 Case #4: 00000 0///0 0/I/0 0///0

```
00000
```

The sample output displays one set of answers to the sample cases. Other answers may be possible. Note that these cases would only appear in the Small dataset.
