## Problem 3 – Disk

In geometry, a **disk** is the region in a plane bounded by a circle (it also **includes** the circle itself). Your task is to **print a disk on the console** by given **radius R** in a square **field of size** **N** x **N** (see the examples below).

### Input

The input data should be read from the console.

* On the first line of the input you will be given the size of the field **N**. On the second line of the input you will be given the radius of the disk **R**.
* The disk’s center **is the center point** of the field (it will always exist, because N is odd).

The input data will always be valid and in the format described. There is no need to check it explicitly.

### Output

The output should be printed on the console. You should print the disk on the console following the examples below.

* Your output must consist of **N** rows, each containing **N** characters. Each character represents a point in the field. For every point you must output one of two possible states – dot ‘**.**’ if the point lies outside of the disk and asterisk ‘**\***’ if the point lies within the disk.

**Hint:** In order to check whether a point is inside or outside of a circle, you may calculate the distance from the point to the center of the field by the **Pythagorean’s** **theorem** (see <http://goo.gl/HwqOuU>).

### Constraints

* The number **N** is a positive **odd** integer in the range [3…39], inclusive.
* The number **R** is a positive integer between 1 and floorNby2 (floor (N/2)), inclusive. This means that the disk will always fit in the field, without crossing its sides.
* Allowed working time for your program: 0.1 seconds.
* Allowed memory: 16 MB.

### Examples

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Input** | **Output** |  | **Input** | **Output** |  | **Input** | **Output** |  | **Input** | **Output** |
| 5  2 | ..\*..  .\*\*\*.  \*\*\*\*\*  .\*\*\*.  ..\*.. | 9  3 | .........  ....\*....  ..\*\*\*\*\*..  ..\*\*\*\*\*..  .\*\*\*\*\*\*\*.  ..\*\*\*\*\*..  ..\*\*\*\*\*..  ....\*....  ......... | 11  1 | ...........  ...........  ...........  ...........  .....\*.....  ....\*\*\*....  .....\*.....  ...........  ...........  ...........  ........... | 19  6 | ...................  ...................  ...................  .........\*.........  ......\*\*\*\*\*\*\*......  .....\*\*\*\*\*\*\*\*\*.....  ....\*\*\*\*\*\*\*\*\*\*\*....  ....\*\*\*\*\*\*\*\*\*\*\*....  ....\*\*\*\*\*\*\*\*\*\*\*....  ...\*\*\*\*\*\*\*\*\*\*\*\*\*...  ....\*\*\*\*\*\*\*\*\*\*\*....  ....\*\*\*\*\*\*\*\*\*\*\*....  ....\*\*\*\*\*\*\*\*\*\*\*....  .....\*\*\*\*\*\*\*\*\*.....  ......\*\*\*\*\*\*\*......  .........\*.........  ...................  ...................  ................... |