Exercises — Display Square

The way is lit. The path is clear.
We require only the strength to follow it.

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Contents

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File Tree

```
display_square/
└── display_square.c   (to submit)
```

Authorized functions : You are only allowed to use the following functions

- putchar(3)

Authorized headers : You are only allowed to use the functions defined in the following headers

- err.h
- errno.h
- assert.h
- stddef.h

Compilation : Your code must compile with the following flags

- -std=c99 -pedantic -Werror -Wall -Wextra -Wvla

Main function : None

1 Goal

Write a function that displays a square on the standard output using `putchar`.

```
void display_square(int width);
```

The square must be written with multiplication characters ($*$) and filled with spaces. Since characters in your shell are not squares but rectangles, here are a few tricks to display good looking squares:

- The width of your square must be an odd number. If the parameter is even, increment it.
- The number of rows must be $(n + 1)/2$, with n the width of the square.

If $n <= 0$, nothing should be displayed. You must add a line break at the end of your square.

Output of `display_square(6)`:

```
*******
*     *
*     *
*******
```

Output of `display_square(11)`:

```
***********
*         *
*         *
*         *
*         *
***********
```

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