

Repeat Matrix

Given a positive integer n , create a matrix A of size $(n + 1) \times (n + 1)$ where each row has identical entries and the values across the rows progress as the arithmetic sequence $2k + 1$ for $k = 0, 1, \dots, n$. For example, for $n = 3$,

$$A = \begin{bmatrix} 1 & 1 & 1 & 1 \\ 3 & 3 & 3 & 3 \\ 5 & 5 & 5 & 5 \\ 7 & 7 & 7 & 7 \end{bmatrix}$$

Input Format

- A positive integer n

Output Format

Output the resulting $(n + 1) \times (n + 1)$ matrix A . Each element should be returned as an integer.

Constraints

- $1 \leq n \leq 2500$

Sample Input

```
n = 3
```

Sample Output

```
[[1 1 1 1],  
 [3 3 3 3],  
 [5 5 5 5],  
 [7 7 7 7]]
```

Implementation

Goal: Fill in the following function:

```
def repeat_matrix(n: int):  
    ...  
    return ... # Return the resulting matrix  
exec("\n".join(iter(input, "# Exit"))) # Don't remove this line
```