Problem 2: Dungeons & Dartboards
7 Points

Problem ID: `darts`
Rank: 2

Introduction

Who doesn't like a good game of darts? While the dartboards in this problem are not tournament-standard, that doesn't make them any less fun! You want to make a dartboard of any size, but drawing rings is tedious—so you want to write a program that will make your life easier.

Problem Statement

Your task is to output a dartboard with $\mathbf{N}$ rings.

A dartboard is a grid of characters with the following criteria:

- The dartboard must have alternating rings of `X`'s and spaces.
- The dartboard must be square.
- The dartboard must have an outer ring of `X`'s. The inner ring may be either `X`'s or spaces.

Input Format

The first line of the input contains a positive integer $\mathbf{T}$ denoting the number of test cases that follow. Each test case consists of a single positive integer $\mathbf{N}$ denoting the number of rings the dartboard must have.

Output Format

For each test case, your program should output a dartboard with $\mathbf{N}$ rings. Each test case output should be separated by a blank line.

Problem Constraints

$1 \leq \mathbf{T} \leq 100$

$1 \leq \mathbf{N} \leq 100$

Sample Test Case

Sample Input

```
3
3
1
8
```

Sample Output

```
XXXXX
X   X
X X X
X   X
XXXXX

X

XXXXXXXXXXXXXXX
X             X
X XXXXXXXXXXX X
X X         X X
X X XXXXXXX X X
X X X     X X X
X X X XXX X X X
X X X X X X X X
X X X XXX X X X
X X X     X X X
X X XXXXXXX X X
X X         X X
X XXXXXXXXXXX X
X             X
XXXXXXXXXXXXXXX
```