

Just draw a square

Your task is to draw a square of size $n \times n$ but you have to distinguish the inner area from the circumference ,
The circumference should be drawn using the character '#'

The inner area should be drawn using the character '='

here is the first few squares :

size 1 :

```
#
```

size 2 :

```
##
```

```
##
```

Input

The first line contains one integer T the number of test cases ($T < 50$), then T lines follows , each with integer n the size of the required square ($n < 50$)

Output

for each test case draw the required square , please separate every case by an empty line .

Example

Input:

```
2
```

```
3
```

```
4
```

Output:

```
###
```

```
##=#
```

```
###
```

```
####
```

```
##==#
```

```
##==#
```

```
####
```