

Simple Pattern !!

Today Yogesh learned about the loops and its application in his programming classes. One application which the professor told was about printing the patterns, the pattern which Yogesh learned was

```
1
123
12345
1234567
```

Yogesh is given an assignment to print a pattern using alphabets (capital only) upto n lines of following format

```
ABCD
BCD
CD
D
```

Now Yogesh is unable to find the solution. So he has come to you, as you are his good friend you have to help him.

Input

The input consists of a number N (≤ 26), the number of lines upto which the pattern is to be printed.

Output

For the input N, print the pattern.

Example

Input:

5

Output:

```
ABCDE
BCDE
CDE
DE
E
```

Input:

8

Output:

```
ABCDEFGH
BCDEFGH
CDEFGH
```

DEFGH
EFGH
FGH
GH
H