

Problem 3—IOW

Professor Plum likes working at UNI (University of Northern Iowa). With all the budget cuts due to reduced State support, he thinks a better name might be “IOW”. For a protest at the State capitol, he wants you to write a program to generate ASCII art printing “IOW” vertically for a sign. Since he does not know the dimensions of the sign, he wants your program to take as input a positive integer scaling factor.

Scaling Factor	Letter Dimension (# characters × # characters)	Line Width of Letters (# characters)	Blank Lines Between Letters
1	3 × 3	1	1
2	6 × 6	2	2
3	9 × 9	3	3
20	60 × 60	20	20

A scaling factor of 1 would produce:

```
III
 I
III
```

```
OOO
O O
OOO
```

```
U U
U U
UUU
```

A scaling factor of 2 would produce:

```
IIIIII
IIIIII
 II
 II
IIIIII
IIIIII
```

```
OOOOOO
OOOOOO
OO OO
OO OO
OOOOOO
OOOOOO
```

```
UU UU
UU UU
UU UU
UU UU
UUUUUU
UUUUUU
```

INPUT SPECIFICATION – File name “prob3.in”

The input file contains a single line with a positive integer scaling factor for the sign.

OUTPUT SPECIFICATION.

The output file should contain the ASCII art for the sign corresponding to the scaling factor specified by the input file.

SAMPLE INPUT.

4<EOLN>

<EOF>

SAMPLE OUTPUT.

IIIIIIIIIIII<EOLN>

IIIIIIIIIIII<EOLN>

IIIIIIIIIIII<EOLN>

IIIIIIIIIIII<EOLN>

....IIII....<EOLN>

....IIII....<EOLN>

....IIII....<EOLN>

....IIII....<EOLN>

IIIIIIIIIIII<EOLN>

IIIIIIIIIIII<EOLN>

IIIIIIIIIIII<EOLN>

IIIIIIIIIIII<EOLN>

<EOLN>

<EOLN>

<EOLN>

<EOLN>

000000000000<EOLN>

000000000000<EOLN>

000000000000<EOLN>

000000000000<EOLN>

0000....0000<EOLN>

0000....0000<EOLN>

0000....0000<EOLN>

0000....0000<EOLN>

000000000000<EOLN>

000000000000<EOLN>

000000000000<EOLN>

000000000000<EOLN>

<EOLN>

<EOLN>

<EOLN>

<EOLN>

UUUU....UUUU<EOLN>

UUUU....UUUU<EOLN>

UUUU....UUUU<EOLN>

UUUU....UUUU<EOLN>

UUUU....UUUU<EOLN>

UUUU....UUUU<EOLN>

UUUU....UUUU<EOLN>

UUUU....UUUU<EOLN>

UUUUUUUUUUUU<EOLN>

UUUUUUUUUUUU<EOLN>

UUUUUUUUUUUU<EOLN>

UUUUUUUUUUUU<EOLN>

<EOF>

←NOTICE THE DOTS (‘.’) REPRESENT BLANK SPACES