

# G Key

Leandro and Fede are traveling by train and to spend some time they decided to start playing the guitar. They want to play together some songs, but Fede's memory is not working well because he caught a little cold. To work it out, Leandro wants to show to Fede some music scores of several punk rock songs. A punk rock song is a sequence of notes, and there are twelve

possible notes, divided in two groups. The first group has seven natural notes called A, B, C, D, E, F and G, while the second group has five alterations called A#, C#, D#, F# and G#.

The way to draw a music score is as follows: you start with an empty one, and then you draw note by note from left to right in the same order they appear in the song. In the following picture you can see an empty music score with two lines. The symbol at the beginning of each line is called G key. Each line is divided in four groups, each group having room for four notes.

In this figure, the song "E, F, F#, G, G#, A, A#, B, C, C#, D, D#" is depicted.



Can you help Leandro writing a program for drawing punk rock songs given the sequence of notes?

## Input

The input contains several test cases. Each test case is described in a single line that contains the number of notes  $N$  ( $1 \leq N \leq 100$ ), followed by the sequence of  $N$  notes. Each note is one of A, A#, B, C, C#, D, D#, E, F, F#, G and G#. Values in each line are separated by single spaces. The last line of the input contains a single -1 and should not be processed as a test case.

## Output

For each test case output the music score of the input song and print a blank line after each test case (even after the last one). You have to follow the sample input and output for drawing the music scores. Every score line has the same background formed by the characters "|" (pipe) and "-" (hyphen). They differ in the borders (first and last borders are doubled), and of course in the notes they have inside. Each eighth note is drawn consecutively as in the sample, and the different heights are those shown. Alterations are preceded by a character "#" (sharp sign). There must be no trailing spaces at the end of printed lines, neither empty score lines (without notes inside).

## Example

Input:

```
36 E F F# G G# A A# B C C# D D# E F F# G G# A A# B C C# D D# E F F# G G# A A# B C C# D D#
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**Output:**

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|| | | | | \ \ | | | |
||-----|-----|\---|---|---x|---#x|---|
|| | | | | \ \ | | | | x| #x|
||-----|\---|\---|---|---x|-----|-----|\---|
|| | | | | | | x| #x| | | | | \ \ | |
||-\---|---|---x|---#x|-----|-----|-\---|---|---x|---|
|| | x| #x| | | | | x| #x| |
||-x|-----|-----|-----|-x|-----|
|| | | | | | | | |
|-----|\---|\-----|-----|
| | | | | | \ \ | | | |
|-----|\---|---|---x|---#x|-----|-----|\---|
| | | | | | | | x| #x| | | | | \ \ | |
|-\---|---|---x|---|-----|-----|\---|\---|---|---x|---|
| | x| #x| | | | | \ \ | | | | x| #x|
|#x|-----|-----|-\---|---|---x|---#x|-----|
| | | | | | | | x| #x| |
|-----|-----|-x|-----|-----|
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|-\---|---|---x|---#x|---|-----|-----||
|x| #x| | | | | | | | | |
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