

I BXComp

1º Campeonato de Programação para Calouros do Curso de Sistemas de Informação 2011

8ª Etapa – Desafio 2

Encrypted Images

Your mission, if you decide to accept it, is to create an image drawing program. The image will consist of characters and spaces.

Input and Output

Your program will get the information for the image from the input file. This file will contain lines of characters which your program must interpret to draw an image. Each row in the file comprises a series of numbers and characters, always taken pairwise, where the leading number (greater than or equal to zero) indicates how many times the character will be used. Be careful, the lowercase letter "b" will be used in the input file just to represent spaces in the image (also following the same number-character format). The character "!", the only unpaired character (that is, not taken pairwise), will be used to represent different rows in the image.

There is no limit to the number of rows in an image or the number of images in a file.

All of the input files are disposed following these rules.

Happy drawing!

Simple Input

Ex1.
1X2a1b1X!4A1b0u1X

Ex2.
1T1b3&2T!1T2b1T1b2T!1T1b1T2b2T!1T3b1T1b1T!2*1T3b1T!1T3b1T1b1T!3*4T

Ex3.
3P1b3E1b3T4b3S1b3I!1P1b1P1b1E4b1T5b1S4b1I!3P1b3E2b1T2b3b3S2b1I!1P3b1E4b1T7b1S2b1I!1P3b3E2b1T5b3S1b3I

Simple Output

Ex1.

```
Xaa X  
AAAA X
```

Ex2.

```
T &&&TT  
T T TT  
T T TT  
T T T  
**T T  
T T T  
***TTTT
```

Ex3.

```
PPP EEE TTT SSS III  
P P E T S I  
PPP EEE T SSS I  
P E T S I  
P EEE T SSS III
```