

Code Problem: Drawing Program

You're given the task of writing a simple console version of a drawing program. At this time, the functionality of the program is quite limited but this might change in the future. In a nutshell, the program should work as follows:

1. create a new canvas
2. start drawing on the canvas by issuing various commands
3. quit

At the moment, the program should support the following commands:

C w h	Should create a new canvas of width w and height h.
L x1 y1 x2 y2	Should create a new line from (x1,y1) to (x2,y2). Currently only horizontal or vertical lines are supported. Horizontal and vertical lines will be drawn using the 'x' character.
R x1 y1 x2 y2	Should create a new rectangle, whose upper left corner is (x1,y1) and lower right corner is (x2,y2). Horizontal and vertical lines will be drawn using the 'x' character.
B x y c	Should fill the entire area connected to (x,y) with "colour" c. The behaviour of this is the same as that of the "bucket fill" tool in paint programs.
Q	Should quit the program.

Sample I/O

Below is a sample run of the program. User input is prefixed with 'enter' command'.

enter command: C 20 4

```
-----  
|                                     |  
|                                     |  
|                                     |  
|                                     |  
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```

enter command: L 1 2 6 2

```
-----  
|                                     |  
|xxxxxx                             |  
|                                     |  
|                                     |  
-----
```

enter command: L 6 3 6 4

```
-----  
|                                     |  
|xxxxxx                             |  
|      x                             |  
|      x                             |  
-----
```

enter command: R 16 1 20 3

```
-----  
|                xxxxx|  
|xxxxxx      x  x|  
|      x      xxxxx|  
|      x                |  
-----
```

enter command: B 10 3 o

```
-----  
|ooooooooooooooooxxxxx|  
|xxxxxxooooooooox  x|  
|      xooooooooxxxxx|  
|      xooooooooooooo|  
-----
```

enter command: Q