

Hour Glass

Write a Java program that displays the following hourglass pattern(the pattern will be shown in the sample output section) using nested loops. Everything can be in `main()`, but you can write additional methods within class `HourGlass` if you like. The only constraint is **each character must be output one character at a time in a loop**. Only one file is need for this program.

HourGlass.java

This file will require one method

`public static void main(String args[])`

In `main()`, you need to set up a scanner(if you forgot how, check the previous project or ask me) to parse one integer and two characters(String) input from the user.

The integer will be the size of the hour glass, and it has to be an odd number. If the user enters an even number, asks for the input again.

The first character will be the hourglass pattern while the second character will be the filler glass pattern. Note that a character can be anything including numbers, letters, space and so on. Store it in char or String.

After you parsed all the necessary information, you will need to use nested loops to display the correct hourglass pattern.

If you have any questions regarding the prompt or confusions about this project, ask me.

Sample Output

User inputs are underlined

Example One:

Please enter the size of the hourglass: 5

Please enter the character for the hourglass pattern: @

Please enter the character for the filler glass pattern: &

@@@@@

&@@@&

&&@&&

&@@@&

@@@@@

Example Two:

Please enter the size of the hourglass: 6

Invalid size! Has to be odd.

Please enter the size of the hourglass: 8

Invalid size! Has to be odd.

Please enter the size of the hourglass: 7

Please enter the character for the hourglass pattern: \$

Please enter the character for the filler glass pattern: #

\$\$\$\$\$\$

#####

##\$\$\$\$##

###\$###

##\$\$\$\$##

#####

\$\$\$\$\$\$

Example Three:

Please enter the size of the hourglass: 7

Please enter the character for the hourglass pattern: *

Please enter the character for the filler glass pattern: // I entered a space here

*
