

Lab 03 Exercise

You have checked out the project called "Fall2017-Lab03" from your CVS repository. You now need to fill in the main method so that the program accomplishes the steps listed below. When you are finished, submit and test the project for a grade. You may work in pairs or small teams on this, but **you each need to submit a correct solution by checking it out and submitting the project from your own account.** This assignment is due before 11pm the day of the lab session.

There are three phases to this lab. The first two have points associated with them. The third does not but it is our suggestion that even if you don't finish it today, you continue to think about it and try it. The submit server will continue to allow you to test your submissions even past the deadline.

IMPORTANT: Do not put any extra characters (such as trailing spaces) in your output if they are not indicated by the specification or you will fail the automated tests!

- 1. There is one space after each question. The provided starter code correctly displays those prompts.**
 - 2. There are no spaces between the individual characters you print or after the last character on a line.**
 - 3. There is a blank line "under" the drawing.**
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Phase 1:

1. Prompt the user to enter a length and interval.
2. Your program will then need to display a single line of output with *length* characters and where there are * characters spaced out according to the entered *interval*, with | characters in the other positions

Example Run 1:

```
Length? 10
Interval? 2
* | * | * | * | * |
```

Example Run 2:

```
Length? 10
Interval? 3
* | | * | | * | | *
```

Phase 2:

1. Prompt the user to enter a shape by name: "square" or "rectangle".
2. Prompt the user to enter a size. Note that if they selected "square" that the program only reads in one integer but if they selected "rectangle" it asks for a width and a height.
3. The program will then need to draw the specified shape using the specified size using the * symbol

Example Run 1:

```
Shape? square
Size? 4
****
****
****
****
```

Example Run 2:

```
Shape? square
Size? 6
*****
*****
*****
*****
*****
*****
```

Example Run 3:

```
Shape? rectangle
Width? 10
Height? 5
*****
*****
*****
*****
*****
```

Example Run 4:

```
Shape? rectangle
Width? 5
Height? 10
*****
*****
*****
*****
*****
*****
*****
*****
*****
*****
```

Phase 3:

1. Prompt the user to enter a size for a triangle.
2. The program will then need to draw a left-justified right triangle using the specified size for the base and height, using the * symbol.

Example Run 1:

Shape? triangle

Size? 4

*

**
