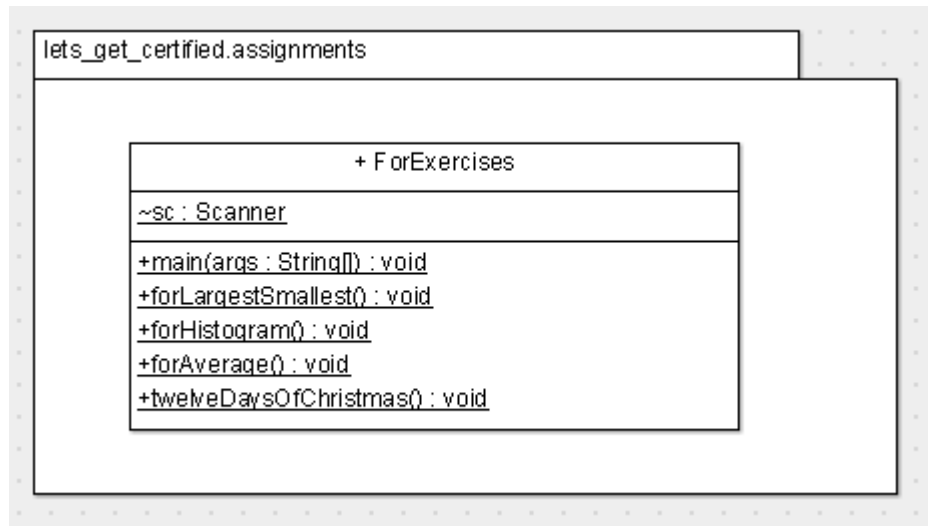


## *for* exercises



1. Write a method called *forLargestSmallest()*. Ask the user for *n* which will determine the number of numbers in the sequence. If *n* is  $\leq 0$  flag an error; otherwise, using a *for* loop, figure out the largest and smallest numbers in the sequence (which will be entered by the user). Cater for the following situations: if the user enters **all** negative/positive numbers, 0 should not be the either the largest or smallest number. For example:  
Enter n: 2  
Enter a number: -2  
Enter a number: -4  
The largest number is -2.  
The smallest number is -4.
2. In a method called *forHistogram()*, ask the user for the number of rows and columns. Using *for* loops, output a histogram i.e. if rows is 3 and columns is 4, then output 3 rows, each row containing 4 stars each.  
Sample output:  
Enter number of rows --> 2  
Enter number of cols --> 5  
\*\*\*\*\*  
\*\*\*\*\*
3. In a method called *forAverage()*, calculate the average of *n* numbers where *n* is based on user input i.e. ask the user for the number of numbers in the sequence. If *n* is  $\leq 0$  flag an error; otherwise, using a *for* loop, loop for that number of iterations *n*. In each iteration, get in a number *num* from the user. Keep a running *total*. When the loop is finished, calculate the average without losing decimal places. Do not divide by 0.
4. In a method called *twelveDaysOfChristmas()*, using a *for* loop and two inner *switch* statements, output the following. Note: “On the” is a hardcoded String literal. So also is “ day of Christmas\nMy true love sent to me: ”. The output of the first *switch* statement is in yellow. The output of the second *switch* statement is in light blue.

On the **first** day of Christmas,  
My true love sent to me:  
A partridge in a pear tree.

On the **second** day of Christmas,  
My true love sent to me:  
Two turtle doves, and  
A partridge in a pear tree.

On the **third** day of Christmas,  
My true love sent to me:  
Three French hens,  
Two turtle doves, and  
A partridge in a pear tree.

On the **fourth** day of Christmas,  
My true love sent to me:  
Four calling birds,  
Three French hens,  
Two turtle doves, and  
A partridge in a pear tree.

On the **fifth** day of Christmas,  
My true love sent to me:  
Five golden rings,  
Four calling birds,  
Three French hens,  
Two turtle doves, and  
A partridge in a pear tree.

On the **sixth** day of Christmas,  
My true love sent to me:  
Six geese a-laying,  
Five golden rings,  
Four calling birds,  
Three French hens,  
Two turtle doves, and  
A partridge in a pear tree.

On the **seventh** day of Christmas,  
My true love sent to me:  
Seven swans a-swimming,  
Six geese a-laying,  
Five golden rings,  
Four calling birds,  
Three French hens,  
Two turtle doves, and

A partridge in a pear tree.

On the **eighth** day of Christmas,  
My true love sent to me:

Eight maids a-milking,  
Seven swans a-swimming,  
Six geese a-laying,  
Five golden rings,  
Four calling birds,  
Three French hens,  
Two turtle doves, and  
A partridge in a pear tree.

On the **ninth** day of Christmas,  
My true love sent to me:

Nine ladies dancing,  
Eight maids a-milking,  
Seven swans a-swimming,  
Six geese a-laying,  
Five golden rings,  
Four calling birds,  
Three French hens,  
Two turtle doves, and  
A partridge in a pear tree.

On the **tenth** day of Christmas,  
My true love sent to me:

Ten lords a-leaping,  
Nine ladies dancing,  
Eight maids a-milking,  
Seven swans a-swimming,  
Six geese a-laying,  
Five golden rings,  
Four calling birds,  
Three French hens,  
Two turtle doves, and  
A partridge in a pear tree.

On the **eleventh** day of Christmas,  
My true love sent to me:

Eleven pipers piping,  
Ten lords a-leaping,  
Nine ladies dancing,  
Eight maids a-milking,  
Seven swans a-swimming,  
Six geese a-laying,  
Five golden rings,  
Four calling birds,

Three French hens,  
Two turtle doves, and  
A partridge in a pear tree.

On the **twelfth** day of Christmas,  
My true love sent to me:

Twelve drummers drumming,  
Eleven pipers piping,  
Ten lords a-leaping,  
Nine ladies dancing,  
Eight maids a-milking,  
Seven swans a-swimming,  
Six geese a-laying,  
Five golden rings,  
Four calling birds,  
Three French hens,  
Two turtle doves, and  
A partridge in a pear tree.