

CITP 190 - Intro to Programming in JAVA
Class Diagram and Logic Diagrams for the Section class

Class Diagram

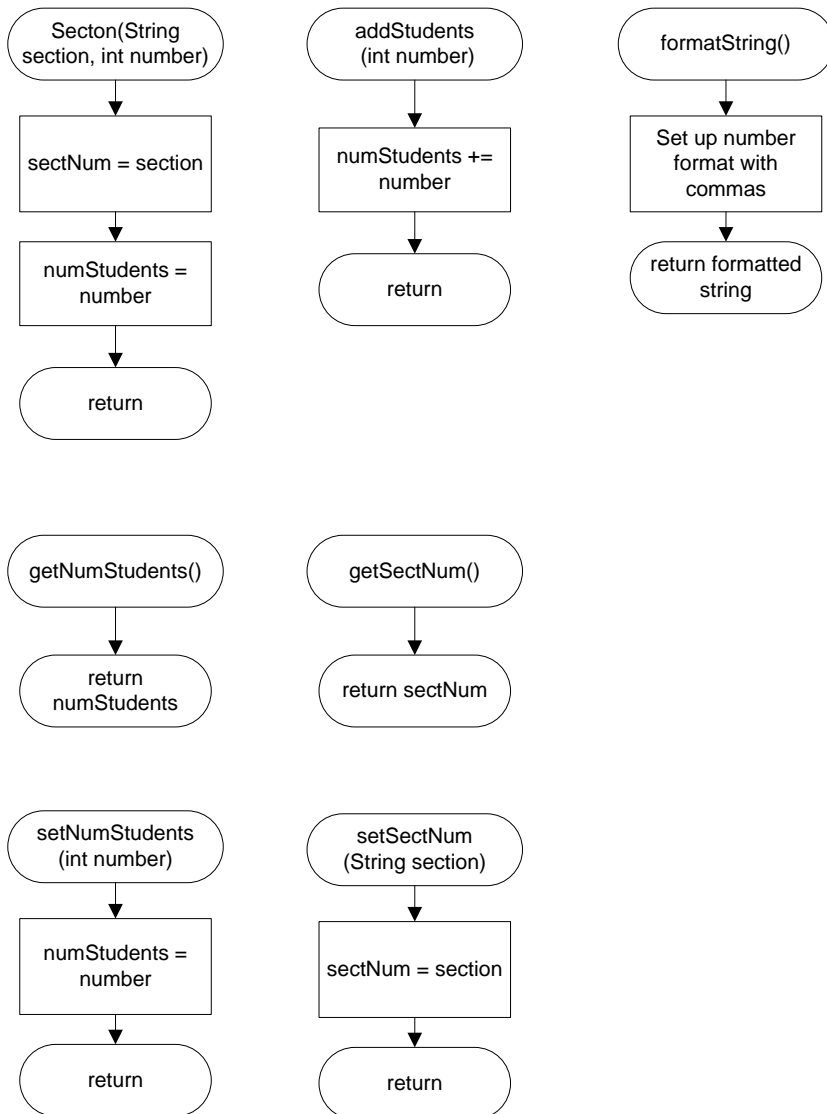
Note: it is easy to create a class diagram using a word processor.

1. Create a table with three rows.
2. In the first row, enter the name of the class, center the name, and change the background to gray.
3. In the second row, enter the names of the instance variables in the order in which they are declared in the class.
 - a. If a instance variable is private, start with a minus sign; if it is public, start with a plus sign.
 - b. Give the name of the instance variable and a colon.
 - c. Give the data type of the instance variable.
4. In the third row, enter the names of the methods in the order in which they are defined in the class.
 - a. If the method is private, start with a minus sign; if it is public, start with a plus sign.
 - b. Give the name of the method
 - c. After the name of the method, open parentheses and put in the data types of the arguments (but not their names). If the method has no arguments leave the parentheses empty.
 - d. If the method returns a value, add a colon after the name of the method and then the data type of the value that is returned.
5. Autofit the table to the contents.

| Section |
|---|
| - sectNum: String - numStudents: int |
| + Section(String, int) + addStudents(int) + formatString(): String + getNumStudents(): int + getSectNum(): String + setNumStudents(int) +setSectNum(String) |

Method Flowcharts

There is one flowchart for each method. Many flowcharts will be very simple. Don't forget to include the arguments in the beginning terminator.



Method Pseudocode

There is one set of pseudocode for each method.

Section

 Set sectNum to section argument

 Set numStudents to number argument

END Section

addStudents

 Add number argument to numStudents

END addStudents

formatString

 Set up number format with commas

 Return formatted string

END formatString

getNumStudents

 Return numStudents

END getNumStudents

getSectNum

 Return sectNum

END getSectNum

setNumStudents

 Set numStudents to number argument

END setNumStudents

SetSectNum

 Set sectNum to section argument

END setSectNum