Pg. 129 – 130, Java Programming *A comprehensive Introduction*

Pg. 131 – 144, Java Programming *A comprehensive Introduction*

Class and Object expanded – Continued

Array- collection of primitive data type, e.g. int, double, float, char, Boolean

Strings- Object – collection of Char – ASCII – represents all characters, symbols, keys on the keyboard as numbers.

**Section 1: Define / Answer**

return method-

return or output some type of primitive value or objects such as string.

Void - returns an actions, contain System.out.println in output

Return – can not contain System.out.prinln.output

It must return value

“programmer created” class- How do “programmer created methods” using **void**, differ from using **return**?

Setters / setclassvariablename()- It is only a void method which takes an Primitive value as an arguments and set those value to the variable inside our derived class.

Getters / getclassvariablevalue()- It is a return type, doesn’t take any arguments and returns the data of our derived class.

|  |
| --- |
| **Programming Conventions in Java** |
| Indentation |
| Variable names have lower case letters. |
| Capitalize first word of the second letter |
| Comments |

Setters (use of void method)

Typically assign value to class/instance variables

Getters (use of return method)

Typically return a value

Encapsulation (1 of 3 key java terms)-

It is a code block  
it restrict access to class methods and instance variables.

**Programming Assignment**

Task 1- Write a program that computes a single filer’s income tax burden.

|  |  |
| --- | --- |
| **TAX RATE** | **Single Filers Income** |
| 10% | Up to $6000 |
| 15% | $6,001 - $27,950 |
| 27% | $27,951 - $67,700 |
| 30% | $67,701 - $141,250 |
| 35% | $141,251 - $307,050 |
| 38.6% | $307, 051 or more |

Create a set() method that will allow the user to input her income using **new** Scanner (System.in), input method and then a get() that will return the amount of tax owed.

All source code for solving the problem and handling user input should be created in a “programmer created class.”

Use **return** for retrieving all values from calculations and **if/else** statements etc.

**main** will be used to operate the program.

Output should have proper formatting for dollars, 2 decimal places.

**Sample Output- //**Output should have proper formatting for dollars, 2 decimal places

Income tax for a single person making $85000.00 is $25500.00

Income tax for a single person making $9800.00 is $1470.00





