

CC3 – Object Oriented Programming

Laboratory Exercise #2
Problem Set on Methods

Name: Date:
Code/Schedule: Terminal #:

Topic(s) Covered: Methods

Estimated Completion Time: 1-2 meetings

Objectives:

1. To apply how to write programs with methods
2. To distinguish methods that pass a value or values and return a value or no value.

Activity:

1. a. Create a class named Exponent. Its main() method accepts an integer value from a user at the keyboard, and in turn passes the value to a method that squares the number (multiplies it by itself) and to a method that cubes the number (multiplies it by itself twice). The main() method prints the results. Create the two methods that, respectively, square and cube an integer that is passed to them, returning the calculated value. Save the application as Exponent.java.

b. Modify the Exponent program so that the cubing method calls the square method, then multiplies that result by the numbers to calculate the cubed value that it returns. Save the application as Exponent2.java.

2. Write an application that calculates and displays the weekly salary for an employee. The main() method prompts the user for an hourly pay rate, regular hours, and overtime hours. Create a separate method to calculate overtime pay, which is regular hours times the pay rate plus overtime hours times 1.5 times the pay rate; return the result to the main() method to be displayed. Save the program as Salary.java.

Laboratory Exercise Score Sheet

Criteria		Score
1 Proper program indention and prescribed format	5	<input type="text"/>
2 Intelligent naming of variables and method names	5	<input type="text"/>
3 Accurate return type of the methods	10	<input type="text"/>
4 Proper Implementation of the program	10	<input type="text"/>