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| Instructor | ***Katherine Papademas*** | Due Date | **08/29/2016** |

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| Part | **1** | **2** | **3** | **4** | Total |
| *Maximum Points* | **25** points | **25** points | **25** points | **25** points | **100**G101010 pointsG |
| ***Your Score*** |  |  |  |  |  |

**Textbook Reading Assignment**

Thoroughly read Chapter(s) 1 in your **Java Programming** textbook.

**Part 1 Glossary Terms**

Define, in detail, each of these glossary terms from the realm of computer programming logic and design and computer topics, in general. If applicable, use examples to support your definitions. Consult your notes or course textbook(s) as references or the Internet by visiting Web sites such as:

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| --- | --- | --- |
| **http://www.askjeeves.com** | **http://www.webopedia.com** | **http://www.wikipedia.org** |

**(a) Applet**

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| An applet is a small Internet-based program written in Java. It is a programming language for the web and can be downloaded from any computer. It is able to run HTML and is usually embedded in an HTML page on a website and is executable from the browser. |

**(b) Class Declaration**

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| This is where you declare the variable types in your program and its object type. It is the first step in creating an object from a class. |

**(c) Compiler**

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| A compiler is the software that helps put your code together and run it to execute your program. It translates your code to the machine you are running it on so that it can execute its functions. |

**(d) Object Class**

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| The object class is the parent class that is at the top of the list in the hierarchy of classes. It helps when trying to refer to an object whose type you do not know. |

**(e) Object - Oriented Programming**

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| OOP is a programming language model that works with objects rather than actions and uses data instead of logic. It uses software classes and objects to model the characteristics of real or abstract objects. |

**Part 2 Introductory Topics in Programming Logic and Design and Java**

Choose from (a), (b), (c), (d) or (e) to answer the following questions.

**(1)** Java was conceived to be platform or device dependent. (a) True

**(2)** Java is an object - oriented programming language. (b) False

**(3)** A main() method is not included in an applet. (a) True

**(4)** Applets are never placed in a Web page. (b) False

**(5)** The & character is the concatenation operator for strings. (a) True

**(6)** The statements of a method appear between a { and a }. (b) False

**(7)** Translating an algorithm into the syntax of Java is the design phase of software development.

(a) True

**(8)** Which of the following sequence of software development steps are in the correct order from start to finish of a project?

(d) design, code, test, maintenance

**(9)** How would a programmer include a comment in a Java program that would be ignored by the compiler?

(c) anything between /\* and \*/

**(10)** Given the following program fragment, what is the purpose of the extends clause?

class SalaryEmployee extends Employee

{ . . . }

(c) It specifies that SalaryEmployee inherits attributes of Employee.

**Part 3 Programming Exercise(s)**

You require a program that calculates discounted prices. You know the original price and the discount percent and you wish to calculate the price after subtracting the discount. Write an algorithm for the solution of this problem. Instead of using actual program code, using English - Like statements ( pseudocode ) to construct your algorithm.

Attach your completed exercise to this assignment sheet.

Set amount of original price

Set amount of discount percent

Set variable for discount amount

Set variable for final price

Do discount amount = original price \* discount percent

Do final price = original price – discount amount

Print final price

**Part 4 Programming Exercise(s)**

Using only the exact lines of code given below, rearrange the statements to modify

the following Java program such that the program will output the following numbers.

Write your completed modified code using the space provided below or attach your

code on a separate piece of paper.

31

21

23

//program code

public class Sample1

{

public static void main(String args[])

{

int a = 1, b = 2, c = 3;

System.out.print(c);

System.out.println(a);

System.out.println(a);

System.out.print(b);

System.out.print(b);

System.out.print(c);

System.out.println("");

}

}

// MODIFIED program code

public class Sample1

{

public static void main(String args[])

{

int a = 1, b = 2, c = 3;

System.out.print(c);

System.out.println(a);

System.out.print(b);

System.out.println(a);

System.out.print(b);

System.out.print(c);

System.out.println("");

}

}