Lab Workbook 1

Software Development HDSWD
Object Oriented Programming Basics Part 1

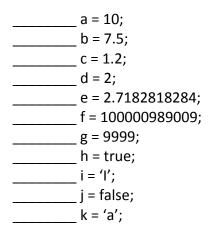
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DESCRIPTION

Lab Workbook 1 covers the topics covered in the Object Oriented Programming Basics Part 1 Lucture: Java Anatomy, Variables, Constants, DataTypes, Operators and Expressions.

Student Name:	
Student Number:	
Date:	

Problem 1: What are the data types of the following variables. Fill in the blanks.



Notes:			

Problem 2: Create a java application that converts a temperature from Celsius to Fahrenheit, printing the conversion to the standard output. The conversion for a temperature from Celsius to Fahrenheit is represented by the following formula:

Fahrenheit value = 1.8 * <value of Celsius> +32

(A) Problem solution and process, Fill in the blanks:

Input (Celsius temp)	Processing	Output
30	1.8 * 30 +32	86
100		
0		

(C) Code the solution to the problem using your rough work as class Problem2C. Notes:	a guide. Call the
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Class Problem2C. Notes:	a guide. Call the
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Problem 3: Create a program that prints the multiplication	division, addition
and subtraction of two integer variables to the standard outpu	
A) Droblem colution and process. Fill in the blanks:	
A) Problem solution and process, Fill in the blanks: nput (Integers) Processing Outp	
c = a * b 50	ıt
a = 5, b = 10	ut
	ut

variable to st	riable names and their data type below. Remember you will need a ore the result of the arithmetic operation so there will be more than ain what they will be used for:
(C) Code the s	solution to the problem using your rough work as a guide. Call the 3C.
Notes:	
	_
	Develop programs to perform arithmetic operations and print the hat you have learnt from the previous problems.
	ne value in i after executing the following program segments? Create a roblem4A to perform these operations.
1.	
•	int i = 12;
	int j = 5;
	i = i / j;
2.	int i = 12;
•	

• i = i % j; i = _____

• i = i / j; i = _____

int i = 10;int j = 5;

3.

(B) The answers to statem	ent 1 and 3 in part (A) are the same. Explain why?
· -	ofter executing the following code segments? The and k = 11;. Create a class called Problem4C to perform
1. i = 4 * (j + 16) % k; 2. i = i - j + k * 7; 3. i = (i - j + k) * 7;	i =
Notes:	