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Quiz 1 (Have a Nice Vacation!)

Q1. Answer the following short answer questions

- a) Draw an expression tree for each of the following Java expressions. Provide the value of each expression.

1. $12 + -5 * 2 + 6 / 3$

2. $a + b * c - d * f / e - g$

- b) Provide the string value resulting from evaluation of each expression, or if the expression would result in an error, explain the error.

1. "the sum of " + 6 + " + " + 10 + " is " + (6 + 10)

2. 6 + 10 + " equals " + (6 + 10)

3. "" + 6 + "+" + 10 + " equals " + 6 + 10

- c) Identify the type (int, double, boolean, or String) of the value that would result from evaluating each Java expression, or if the expression would result in an error, explain the error. If there is no error, provide the value of the expression as well as the type.

1. $7.0 / 2$

2. $6 + " = x"$

3. $((6 * 3) / 80) / (35 - 7 * 5)$

4. $1 / 2$

5. $80 \% 8 + 3 * 3$

Q2. Solve only one of the following:

- a) Write a Java program that takes any uppercase string and convert it to lowercase case string with capitalized initials, the string contains at most 3 words.

Example: if it takes "JAVA IS EASY" it returns "Java Is Easy".

- b) Write a program Average.java that defines and initializes the GPAs of three students, then computes and prints the average GPA of the three students in the following format:

Student1 GPA:	12
Student2 GPA:	14
Student3 GPA:	8
Students Average GPA:	11.333333

~ Good Luck! ~