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COURSE: BSCS A2021 ASSIGMENT NO.1

INTERMEDIATE PROGRAMMING (ADV. JAVA)

Provide the answer for the following questions:

- 1. Steps to Writing a Program
 - Understand the problem you are trying to solve
 - Design a solution
 - Draw a flow chart
 - Write pseudo-code
 - Write code
 - · Test and debug
 - Test with real-world users
 - Release program
 - Iterate the steps for the next version
- 2. What is error?
 - An error describes any issue that arises unexpectedly that cause a computer to not function properly
- 3. What are the different types of error?
 - syntax errors.
 - logic errors.
 - runtime errors.
- 4. What is Java Array?
 - Arrays are used to store multiple values in a single variable, instead of declaring separate variables for each value.

5. What is array representation?

 An Array is a Linear data structure which is a collection of data items having similar data types stored in contiguous memory locations. By knowing the address of the first item we can easily access all items/elements of an array. Arrays and its representation is given below.

6. What are the types of array? Differentiate each.

Creating Indexed Arrays

Indexed arrays store a series of one or more values. You can look up items by their position in the array, which you might have done in earlier sections.

Creating Multidimensional Arrays

In ActionScript, you can implement arrays as nested arrays that are essentially arrays of arrays. Nested arrays, also known as multidimensional arrays, are very similar to matrices or grids.

Creating Associative Arrays

An associative array, which is like an object, is made of unordered keys and values. Associative arrays use keys instead of a numeric index to organize stored values. Each key is a unique string, and it's associated with and used to access one value.

7. What are the array class?

Class Array. The Array class provides static methods to dynamically create and access
Java arrays. Array permits widening conversions to occur during a get or set operation,
but throws an IllegalArgumentException if a narrowing conversion would occur.

8. What is java swing?

• Java Swing is a lightweight Java graphical user interface (GUI) widget toolkit that includes a rich set of widgets.