Day 7

Assignment

Question1 What is statically typed and dynamically typed programming language?

Ans-

A statically type programming language is one where the type of a variables is determined

at Compile time, and fixed for the duration of the program’s execution. In other words,the

data Type of a variable is declared and assigned when the program is written and the

program is Validated to make sure that any operations on that variable are legal. Some

Examples of Statically typed languages include C,C++,Java,and Rust.

On the other hand, a dynamically typed programming language is one where the type of a variable is determined at runtime, when the program is actually running. This means that the type of a variable Can change during the execution of the program. The program does not validate that the operations on the variable are until runtime, Which can lead to errors if the type of the variable changes unexpectedly. Some examples of dynamically typed languages include Python, Ruby, and JavaScript.

In simple words , statically typed languages can catch errors at compile-time , making it easier to find and fix bugs before running the program. Dynamically typed languages,on the other hand, tend to be more flexible and easier to write, but can be harder to debug if errors occur at runtime.

Question 2- What is the variable in Java?

Ans-

A variable is the name of a memory-allocation reserved area. It may be thought of as the name of a memory location, in other words.

. While the Java programme is running, the value is held in a container.

. To identify the storage location,each variable needs to have a special name.

. A data type is assigned to a variable .

Question 3- How to Assign a value to a variable ?

Ans-

For example- type variableName = value; Where type is one of Java’s types (like int or string), and variableName is the name of the variable (such as Y or name). The equal sign is used to assign values to the variable.

Question 4- What are Primitive Data types in Java?

Ans-

A primitive type is predefined by the language and is named by a reserved keyword.

1. Boolean
2. Byte
3. Short
4. Int
5. Long
6. Double
7. Float
8. char

Question 5- What are the identifiers in Java?

Ans-

An identifier is a name given to a package,class,interface,method,or variable. All identifiers must have different names.

In Java, there are a few points to remember while dealing with identifiers:

Rules

1. All identifiers should begin with a letter (A to Z or a to z), $ and \_ and must be unique.
2. After the first character/letter,identifiers can have any combination of characters.
3. A keyword cannot be used as an identifier.
4. The identifiers are case-sensitive.
5. White Spaces are not permitted.

Example of legal identifiers: grade,$name, \_value, \_ \_1\_mark.

Example of illegal identifiers: 432xty, -name.

Question 6- List the Operators in Java ?

Ans-

Operators in Java can be classified into 6 types:

1. Arithmetic operations
2. Relational operators
3. Logical operations
4. Assignment operations
5. Unary operations
6. Bitwise operations

Question 7- Explain about increment and Decrement operators and give an examples

Ans-

++ Increment - The increment operator ++ increases the value of a variable by 1.

For example i = 1; j= ++i; (i is 2, j is 2) i++; j= i++; (i is 2, j is 1)

- - Decrement - The decrement operator -- decreases the value of a variable by 1.

For example i=2; j = --i; (i is 1, j is -1) i-- ; j= i-- ;

