1 Variable: In Java, a variable is a container for storing data values. Variables must be declared with a type, which defines what kind of data they can hold.

2 Identifier: An **identifier** in Java is a name used to identify a variable, method, class, or other user-defined item in a program.

class and objects

Class: A **class** in Java is a blueprint for creating objects, defining their properties and behaviors.

Objects: An **object** is an instance of a class, representing a specific entity with its own state and behavior.

4. Literals: A **literal** in Java is a fixed value that is directly represented in the code. Literals can be of various types, including integer literals, floating-point literals, character literals, string literals, and boolean literals.

5. **Java Conditional Statements:**

1. **if Statement**: Executes a block of code if a specified condition is true.
2. **if-else Statement**: Executes one block of code if a condition is true and another block if it is false.
3. **else-if Ladder**: A chain of if-else statements that allow multiple conditions to be checked sequentially.
4. **switch Statement**: A multi-way branch statement that selects one of many code blocks to execute based on the value of a variable or expression.

6. **Java Loops:**

1. **for Loop**: Repeats a block of code a specified number of times based on a counter.(Entry Control)
2. **while Loop**: Repeats a block of code as long as a specified condition is true. (Entry Control)
3. **do-while Loop**: Similar to the while loop, but guarantees that the block of code is executed at least once before the condition is checked. (Exit Control)

8. **Access modifiers** in Java are keywords that determine the visibility or accessibility of classes, methods, and variables. They control how the members of a class can be accessed from other classes or packages. The four main access modifiers are:

1. public: Members are accessible from any other class.
2. protected: Members are accessible within the same package and by subclasses.
3. default (no modifier): Members are accessible only within the same package.
4. private: Members are accessible only within the same class.

9. **Constructor:** A **constructor** in Java is a special method used to initialize objects. It has the same name as the class, does not have a return type, and is called when an object is created. Constructors can be parameterized or no-argument.

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**12. Packages:** A **package** in Java is a namespace that organizes a set of related classes and interfaces. It helps in avoiding name conflicts, controlling access, and making it easier to locate and use classes. Packages can be built-in (like java.util) or user-defined.

**String**

A **String** in Java is a sequence of characters used to represent text. Strings are immutable, meaning once created, their values cannot be changed. The String class provides various methods for string manipulation, such as concatenation, substring extraction, and searching.