**Access Modifiers, this and static keywords**

**Access Modifiers:**

Access modifiers in Java are keywords that control the visibility and accessibility of classes, methods, variables, and constructors.

**Types of Access modifiers:**

1. **Public:** Accessible everywhere.
2. **Private:** Accessible only within the class where it is declared.
3. **Protected:** Accessible within same package and subclass (in other package).
4. **Default (no modifier):** Accessible within the same package.

(Note: For Classes only public and default modifiers are allowed.)

**This keyword:**

- In Java, “this” is a reference variable that refers to the current object.

- It is mainly used to:

* Differentiate between instance variable and parameter.
* Call other constructor.
* Pass the current object.

**Static keyword:**

- The static keyword belongs to the class rather than an instance of the class.

- Shared across all objects.

- Can be:

* Static variables:

- Are shared by all instances of a class.

- Can be accessed using the class name or instance name.

* Static methods:

- Belong to the class, not to any instance.

- Can access only static variables and other static methods.

* Static blocks:

- Executed before the constructor

- Used to initialize static variables o perform other setup tasks.