**What is a Delegate?**

**A delegate is a type that holds a reference to a method with a specific signature.  
It allows you to pass methods as parameters or store them in variables.**

**Built-in Delegate Types:**

**1. Action**

* **Represents a method that returns nothing (void).**
* **Can take 0 to 16 parameters.**

**Use it when:  
You just want to perform an action without returning a result.**

**2. Func**

* **Represents a method that returns a value.**
* **Takes input parameters, and the last type is the return type.**

**Use it when:  
You need to return a value (like a calculation or result).**

**3. Predicate**

* **Special case of Func<T, bool>.**
* **Takes one input and returns true or false.**

**Use it when:  
You want to check a condition (like filtering or validation).**

**Quick Comparison:**

| **Type** | **Returns Value?** | **Use Case** |
| --- | --- | --- |
| **Action** | **No (void)** | **Perform an operation** |
| **Func** | **Yes** | **Return a value** |
| **Predicate<T>** | **Yes (bool)** | **Check a condition (true/false)** |