**DSA (Data Structures and Algorithms)**

** Data Structures help organize and store data efficiently (like Arrays, Linked Lists, Trees, Graphs, Hash Tables).**

** Algorithms are the step-by-step instructions to solve problems using these structures (like Sorting, Searching, Dynamic Programming).**

1. **Scope (kahan tak valid hai)**
   * **var function ke andar kahin bhi access ho sakta hai (function-scoped).**
   * **let aur const sirf us block ke andar valid hote hain jahan declare kiya (block-scoped).**
2. **Re-declaration (dubara declare kar sakte ho ya nahi)**
   * **var ko same scope me dubara declare kar sakte ho (error nahi aayega).**
   * **let aur const ko same block me dubara declare nahi kar sakte (error aata hai).**
3. **Re-assignment (value change kar sakte ho ya nahi)**
   * **var aur let dono me value change kar sakte ho.**
   * **const me value ek baar set karne ke baad change nahi kar sakte.**

**Short me:**

* **var – function scoped, re-declare & re-assign dono kar sakte ho.**
* **let – block scoped, re-declare nahi.**
* **const – block scoped, na re-assign kar sakte ho, na re-declare.**

**var a = 10;**

**var a = 20; // ✅ allowed with var**

**let b = 10;**

**let b = 20; // ❌ error – let can't be redeclared**

**const c = 10;**

**const c = 20; // ❌ error – const can't be redeclared**

**re assignement**

**let x = 5;**

**x = 10; // ✅ Reassignment allowed**

**const y = 5;**

**y = 10; // ❌ Error – const me reassignment allowed nahi**

**var z = 5;**

**z = 15; // ✅ Reassignment allowed**