DIFFERENCE TABLE – 4

Difference between 'array' and 'structure'

S. No.	ARRAY	STRUCTURE
1	**Data Collection**: Array is a collection of homogeneous data.	**Data Collection**: Structure is a collection of heterogeneous data.
2	**Element Reference:** Array elements are referred by subscript.	**Element Reference:** Structure elements are referred by its unique name.
3	**Access Method:** Array elements are accessed by it's position or subscript.	**Access Method:** Structure elements are accessed by its object as '.' operator.
4	**Data type:** Array is a derived data type.	**Data type:** Structure is user defined data type.
5	**Syntax**: <data_type> array_name[size];	**Syntax**: **struct** struct_name { Structure_element_1; Structure_element_2; ---------- ---------- Structure_element_n; }struct_var_nm;
6	**Example:** **int** rn_array[5];	**Example:** **struct** item_mst { int rno; char m_array[50]; }it;

Difference between 'structure and 'union'

S. No.	STRUCTURE	UNION
1	The amount of memory required to store a structure variable is the sum of the size of all the members.	The amount of memory required is always equal to that required by its largest member.
2	In structure, each member have their own memory space.	In union, one block is used by all the member of the union.
3	**Syntax**: **struct** struct_name { Structure_element_1; Structure_element_2; ---------- ---------- Structure_element_n; }struct_var_nm;	**Syntax**: **union** union_name { union_element_1; union_element_2; ---------- ---------- union_element_n; }union_var_nm;
4	**Example:** **struct** item_mst { int rno; char m_array[50]; }it;	**Example:** union item_mst { int rno; char m_array[50]; }var1;