

Que29. Difference Between Structure and Union.

Sr. No.	Parameter	Structure	Union
1	Keyword	A user can deploy the keyword struct to define a Structure.	A user can deploy the keyword union to define a Union.
2	Internal Implementation	The implementation of Structure in C occurs internally- because it contains separate memory locations allotted to every input member.	In the case of a Union, the memory allocation occurs for only one member with the largest size among all the input variables. It shares the same location among all these members/objects.
3	Accessing Members	A user can access individual members at a given time.	A user can access only one member at a given time.
4	Syntax	<p>The Syntax of declaring a Structure in C is:</p> <pre>struct [structure name] { type element_1; type element_2; . . } variable_1, variable_2, ...;</pre>	<p>The Syntax of declaring a Union in C is:</p> <pre>union [union name] { type element_1; type element_2; . . } variable_1, variable_2, ...;</pre>
5	Size	A Structure does not have a shared location for all of its members. It makes the size of a Structure to be greater than or equal to the sum of the size of its data members.	A Union does not have a separate location for every member in it. It makes its size equal to the size of the largest member among all the data members.
6	Value Altering	Altering the values of a single member does not affect the other members of a Structure.	When you alter the values of a single member, it affects the values of other members.
7	Storage of Value	In the case of a Structure, there is a specific memory location for every input data member. Thus, it can store multiple values of the various members.	In the case of a Union, there is an allocation of only one shared memory for all the input data members. Thus, it stores one value at a time for all of its members.
8	Initialization	In the case of a Structure, a user can initialize multiple members at the same time.	In the case of a Union, a user can only initiate the first member at a time.