

UNION

Union

Union is derived data type like structure and it can also contain numbers of different data types where member variable share a common memory space . The main difference between union and structure is in the way memory is allocated for the members . In structure each member has its own memory location where as member of union share the same memory location.

Structure	Union
Struct is keyword for structure	Union is keyword for union
Each member within a structure is assign its own unique storage	All member within union share the same storage area of computer memory
It take more memory storage then union	It takes less memory storage then structure
The amount of memory required to store a structure is the sum of the size of the entire memory	The amount of memory required to store an union is same as member occupies largest memory
All the structure members can be accessed at any point of time	Only one member of union can be accessed at any given time.
Structure is more popular and used data structure as compared union	Union is less used as compaired to structure

Declaration of union

To declare a union you must start with the keyword **union**.

Syntax:-

```
Union union_name
{
Datatype member 1;
Datatype member 2;
Datatype member 3;
} union variables;  (union variable also can
                    declare on main function)
```

Example 1:-

```
union student
{
    int roll;
    char sec;
    int st_class;
}stu ;
```

Example 2:-

```
union student
{
    int roll;
    char sec;
    int st_class;
};
Main()
{
    union student stu ;
}
```

Accessing The Member of a union

Union members are accessed using operator (.) .

```
union student
{
    int roll;
    char sec;
    int st_class;
}stu ;
main()
{
    stu.roll=10;
    stu.sec='a';
    stu.st_class=2;
    getch();
}
```