

C++ Structures

A structure is a user-defined data type in C/C++.

A structure creates a data type that can be used to group items of possibly different types into a single type.

The ‘struct’ keyword is used to create a structure.

```
struct structureName
```

```
{
```

```
    member1;
```

```
    member2;
```

```
    member3;
```

```
.
```

```
};
```

Structures in C++

- Structure is a collection of variables of different data types under a single name.
- It is similar to a class in that, both holds a collection of data of different data types.
- **Structures in C++ can contain two types of members:**
- **Data Member:** These members are normal C++ variables. We can create a structure with variables of different data types in C++.
- **Member Functions:** These members are normal C++ functions. Along with variables, we can also include functions inside a structure declaration.

```
#include <iostream>
using namespace std;

struct Person
{
    char name[50];
    int age;
    float salary;
};

int main()
{
    Person p1;

    cout << "Enter Full name: ";
    cin.get(p1.name, 50);
    cout << "Enter age: ";
    cin >> p1.age;
    cout << "Enter salary: ";
    cin >> p1.salary;

    cout << "\nDisplaying Information." << endl;
    cout << "Name: " << p1.name << endl;
    cout << "Age: " << p1.age << endl;
    cout << "Salary: " << p1.salary;

    return 0;
}
```