8-1 Structures:

C++ allows aggregating of variables belonging to different data types into heterogeneous data structures called Structures.

Structure (the keyword **struct** is used in C++) is use to group variables into a single record. Keyword struct is a data-type, like the following C++ data-types (int, float, char, etc...).

General Form of Structure:

struct *struct-name*
{
    variables …
};

8-2 The Three Ways for Declare the Structure:

```
#include <iostream.h>
struct  data
{
    char *name;
    int age;
};

void  main()
{
    struct  data  student;
```

To access elements in a structure, use a record selector (.).

```
student . name="ahmed";
student . age=20;
        :
        :
}
```

There is another **second-way** to define the struct, as shown:

```
struct  data
{
    char *name;
    int age;
} student;
```

Also, there is another **third-way** to define the struct, as shown:

```
typedef  struct
{
    char *name;
    int age;
} student;
```

Note: we can assign more than one name as a structure-name, to the one structure. For example:

```
typedef  struct
{
    char *name;
    int age;
} student , lecturer;
```