# Classes and Objects

- C Structure Revised
- Specifying Class
  - Visibility Labels / Access Specifiers
    (Public, Private, Protected)
  - Creating a Class
  - Creating an Object
  - Accessing Class Members
- Defining Member Functions
  - Outside the Class Definition
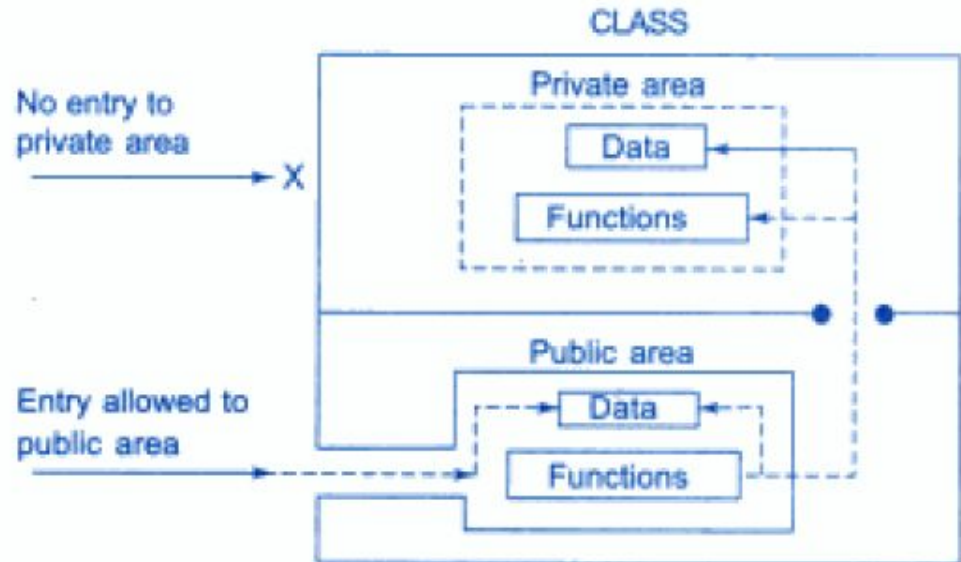  - Inside the Class Definition
- A C++ Program with Class

# C Structure

```
struct student
{
    Char name[20];
    int misNo;
    Float per;
};


struct student s;
```

# Specifying a Class

```
class class_name
{
        private:
                variable declarations;
                function declarations;
        public:
                variable declarations;
                function declaration;
};
```

CLASS

Private area

No entry to
private area                    → X

Data

Functions

Public area

Entry allowed to
public area

Data

Functions

# Specifying a Class

A typical class declaration would look like:

```
class item
{
    int number;              // variables declaration
    float cost;              // private by default
  public:
    void getdata(int a, float b);   // functions declaration
    void putdata(void);             // using prototype
};// ends with semicolon
```

- **Creation of an Object**

- **Accessing Class Members**

# Defining Member Functions

Member functions can be defined in two places

- Inside the Class Definition

- Outside the Class Definition

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```
return-type class-name :: function-name (argument declaration)
    {
            Function body
    }
```