

# C++ Notes - BCA – 3<sup>rd</sup> Semester – 02122020

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## • Class –

- The building block of C++ that leads to Object Oriented programming is a Class. It is a user defined data type, which holds its own data members and member functions, which can be accessed and used by creating an instance of that class.
- A class is like a blueprint for an object.
- Each and every class has two specific properties –
  - Member Variables
  - Member Functions
- There are 2 ways to define a member function:
  - Type – I: Inside class definition
  - Type – II: Outside class definition

## • Object –

- An Object is an instance of a Class. When a class is defined, no memory is allocated but when it is instantiated (i.e. an object is created) memory is allocated.
- Declaring Objects - When a class is defined, only the specification for the object is defined; no memory or storage is allocated. To use the data and access functions defined in the class, you need to create objects.
- **Syntax:**                    *ClassName ObjectName;*

## Type - I

```
#include<iostream.h>
#include<conio.h>

class Sample
{
    private:
        //Member Variables(data members)
        int a,b,c;

    public:
        //Member Functions
        void getdata()
        {
            cout<<"Enter the numbers: ";
            cin>>a>>b;
        }

        void putdata()
        {
            c = (a + b);
            cout<<"Sum is: "<<c;
        }
};

void main()
{
    Sample suniti;
    suniti.getdata();
    suniti.putdata();
}
```

## Type - II

```
#include<iostream.h>
```

```
#include<conio.h>
```

```
class Sample
```

```
{
```

```
    private:
```

```
        int a,b,c;
```

```
    public:
```

```
        void getdata();
```

```
        void putdata();
```

```
};
```

```
void Sample :: getdata()
```

```
{
```

```
    cout<<"Enter the numbers: ";
```

```
    cin>>a>>b;
```

```
}
```

```
void Sample :: putdata()
```

```
{
```

```
    c = (a + b);
```

```
    cout<<"Sum is: "<<c;
```

```
}
```

```
void main()
```

```
{
```

```
    Sample obj;
```

```
    obj.getdata();
```

```
    obj.putdata();
```

```
}
```