

## Base class Pointer pointing to derived class object

- Base class pointer can point on derived class object
- But only those functions which are in base class, can be called
- If derived class is having overrides functions they will not be called unless base class functions are declared as virtual
- Derived class pointer cannot point on base class object

### Example 1

```
class Base
{
public:
    void fun1()
    {
        cout<<"fun1 of Base "<<endl;
    }
};
```

### Example 2

```
class Derived: public Base
{
public:
    void fun2()
    {
        cout<<"fun2 of Derived"<<endl;
    }
};

class Rectangle
{
public:
    void area()
    {
        cout<<"Area of Rectangle"<<endl;
    }
};

class Cuboid: public Rectangle
{
public:
    void volume()
    {
        cout<<"Volume of Cuboid"<<endl;
    }
};
```

### Example 3

```
class BasicCar
{
public:
    void start()
    {
        cout<<"Car started"<<endl;
    }
};

class AdvanceCar: public BasicCar
{
public:
    void playMusic()
```

```
    {  
        cout<<"Music Playing"<<endl;  
    }  
};
```