Inheritance

Access Modifier

1. Public
2. Private
3. Protected

Public Class A
{
    Int i , j;
 	
     void abc ()
    {
      S=u+t;
    }
  Int x , y
 	
}
	1. Particular member access modifier
	2. Access modifier block
	3. Class declaration as a public

Concept Of Inheritance

- Way-1 : calling parent class component from main method using child class object reference
- Way-2 : calling parent class member from child class

	Mode of inheritance		
	Public	Protected	private
Base class access modifier			
public	w1 ,w 2 Publicly	W1 , w2 Protectedly	W1 , w2 privately
protected	W1 , w2 protectedly	W1 , w2 Protectedly	W1 , w2 privately
private	W1 , W2 Not possible	W1 , W2 Not possible	W1 , W2 Not possible

Mode Of inheritance

- Public Mode
- Private Mode
- Protected Mode

Public mode	Protected mode	Private Mode

class classOne{
public:
};
 	
class classTwo : public classOne{
   }
};
	class classOne{
	public:
	};
	
	class classTwo : Protected classOne{
	    }
	};
		class classOne{
		public:
		};
		
		class classTwo : private classOne{
		   }
		};

Types Of Inheritance

1. **Single Inheritance**
2. **Multiple Inheritance**
3. **Multilevel Inheritance**
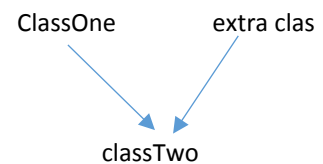4. Hybrid Inheritance
5. Hierarchical Inheritance

1. Single

```
 class classOne{
public:
};

class classTwo : public classOne{
   }
};
```

2. Multiple Inheritance

```
class classOne{
public:
};

class extraClass{
public:
};
```

ClassOne   extra clas

classTwo

class classTwo : public classOne , protected extraClass{
   }
};	

3. Multi Level Inheritance

class classOne{
public:
};
 	
class extraClass : public classOne{
public:
};
 	
Class reExtra : public extraClass {
Public:
};
 	
class classTwo : public classOne {
   }
};
	ClassOne
	
	extraClass classTwo
	
	reExtraClass