

```

#include <iostream>
using namespace std;

class Base {
public:
    int publicVar;

protected:
    int protectedVar;

private:
    int privateVar;
};

// Public inheritance
class PublicDerived : public Base {
public:
    void accessBaseMembers() {
        publicVar = 10; // Public member accessible
        protectedVar = 20; // Protected member accessible
        // privateVar = 30; // Private member not accessible
    }
};

// Protected inheritance
class ProtectedDerived : protected Base {
public:
    void accessBaseMembers() {
        publicVar = 10; // Public member accessible
        protectedVar = 20; // Protected member accessible
        // privateVar = 30; // Private member not accessible
    }
};

// Private inheritance
class PrivateDerived : private Base {
public:
    void accessBaseMembers() {
        publicVar = 10; // Public member accessible
        protectedVar = 20; // Protected member accessible
        // privateVar = 30; // Private member not accessible
    }
};

int main() {
    PublicDerived pub;
    pub.publicVar = 10; // Public member accessible
    // pub.protectedVar = 20; // Protected member not accessible
    // pub.privateVar = 30; // Private member not accessible

    ProtectedDerived prot;
    // prot.publicVar = 10; // Public member not accessible

```

```
// prot.protectedVar = 20; // Protected member not accessible  
// prot.privateVar = 30; // Private member not accessible
```

```
PrivateDerived priv;
```

```
// priv.publicVar = 10; // Public member not accessible  
// priv.protectedVar = 20; // Protected member not accessible  
// priv.privateVar = 30; // Private member not accessible
```

```
return 0;
```

```
}
```