截图

1.

```cpp
#include<iostream>
#include <string.h>
using namespace std;
class Student{
    public:
        void get_value(){
            cin>>num>>name>>sex;
        }
        void display(){
            cout<<"num: "<<num<<endl;
            cout<<"name: "<<name<<endl;
            cout<<"sex: "<<sex<<endl;
        }
    private:
        int num;
        string name;
        char sex;
};
class Student1:public Student{
    public:
        void get_value_1(){
            cin>>age>>addr;
        }
        void display_1(){
            cout<<"age: "<<age<<endl;
            cout<<"address: "<<addr<<endl;
        }
    private:
        int age;
        string addr;
};

int main(){
    Student1 stud1;
    stud1.get_value();
```

```cpp
        stud1.get_value_1();
        stud1.display();
        stud1.display_1();
        return 0;
}
```

```
1001 zhang m 21 shanghai
num: 1001
name: zhang
sex: m
age: 21
address: shanghai

_____
```

2.

```cpp
#include <iostream>
#include <string>
using namespace std;
class Student{
    public:
        void get_value(){
            cin>>num>>name>>sex;
        }
        void display(){
            cout<<"num: "<<num<<endl;
            cout<<"name: "<<name<<endl;
            cout<<"sex: "<<sex<<endl;
        }
    private:
        int num;
        string name;
        char sex;
};
class Student1:private Student{
    public:
        void get_value_1(){
            cin>>num>>name>>age>>sex;
        }
        void display_1(){
            cout<<"age: "<<age<<endl;
```

```
                cout<<"address:"<<addr<<endl;
        }
    private:
        int age;
        string addr;
};

int main(){
    Student1 stud1;
    stud1.get_value();
    stud1.get_value_1();
    stud1.display();
    stud1.display_1();
    return 0;
}
```

```
1001 zhang m 21 shanghai
num: 1001
name: zhang
sex: m
age: 21
address: shanghai


_____
```

3.

```
#include <iostream>
#include <string>
using namespace std;

class Student{
    public:
    protected:
        int num;
        string name;
        char sex;
};

class Student1:protected Student{
    public:
        void get_value1();
```

```cpp
        void display1();
    private:
        int age;
        string addr;
};

void Student1::get_value1(){
    cin>>num>>name>>sex;
    cin>>age>>addr;
}

void Student1::display1(){
        cout<<"num: "<<num<<endl;
        cout<<"name: "<<name<<endl;
        cout<<"sex: "<<sex<<endl;
        cout<<"age: "<<age<<endl;
        cout<<"address: "<<addr<<endl;
}
int main(){
    Student1 stud1;
    stud1.get_value1();
    stud1.display1();
    return 0;
}
```

```
1001 zhang m 21 shanghai
num: 1001
name: zhang
sex: m
age: 21
address: shanghai

-----------------------------
```

4.

```cpp
#include<iostream>
#include <string.h>
using namespace std;
class Student{
    public:
        void get_value(){
```

```cpp
            cin>>num>>name>>sex;
        }
        void display(){
            cout<<"num: "<<num<<endl;
            cout<<"name: "<<name<<endl;
            cout<<"sex: "<<sex<<endl;
        }
    private:
        int num;
        string name;
        char sex;
};
class Student1:public Student{
    public:
        void get_value_1(){
            cin>>age>>addr;
        }
        void display_1(){
            cout<<"age: "<<age<<endl;
            cout<<"address: "<<addr<<endl;
        }
    private:
        int age;
        string addr;
};

int main(){
    Student1 stud1;
    stud1.get_value();
    stud1.get_value_1();
    stud1.display();
    stud1.display_1();
    return 0;
}
```

```
1001 zhang m 21 shanghai
num: 1001
name: zhang
sex: m
age: 21
address: shanghai

----------------------------
```

7.

```cpp
//7
#include <iostream>
#include <string>
using namespace std;
class A{
    public:
        A(){
            a = 0;
            b = 0;
        }
        A(int i){
            a = i;
            b = 0;
        }
        A(int i,int j){
            a = i;
            b = j;
        }
        void display(){
            cout<<"a = "<<a<<"b = "<<b;
        }
    private:
        int a;
        int b;
};

class B:public A{
    public:
        B(){
            c = 0;
        }
        B(int i):A(i){
            c = 0;
```

```cpp
        }
        B(int i,int j):A(i,j){
            c = 0;
        }
        B(int i,int j,int k):A(i,j){
            c = k;
        }
        void display1(){
            cout<<"c = "<<c<<endl;
        }
    private:
        int c;
};

int main(){
    B b1;
    B b2(1);
    B b3(1,3);
    B b4(1,3,5);
    b1.display1();
    b2.display1();
    b3.display1();
    b4.display1();
    return 0;
}
```

```
c = 0
c = 0
c = 0
c = 5


_____
```