

```

1  #include <iostream>
2  using std::cout;
3  using std::endl;
4
5  class base
6  {
7  protected:
8      int no;
9      int no1;
10
11 public:
12     base()
13     {
14         cout << "In base constructor\n";
15         no = 10;
16         no1 = 100;
17     }
18 };
19
20 class derived1 : virtual public base
21 {
22 protected:
23     int no;
24     int no2;
25
26 public:
27     derived1()
28     {
29         cout << "In derived1 constructor\n";
30         no = 20;
31         no2 = 200;
32     }
33 };
34
35 class derived2 : virtual public base
36 {
37 protected:
38     int no;
39     int no3;
40
41 public:
42     derived2()
43     {
44         cout << "In derived2 constructor\n";
45         no = 30;
46         no3 = 300;
47     }
48 };
49
50 class derived : public derived1, public derived2
51 {
52 public:
53     derived()
54     {
55         cout << "In derived constructor\n";
56     }
57
58     void display()
59     {
60         cout << base::no << endl;
61         cout << derived1::no << endl;
62         cout << derived2::no << endl;
63         cout << no1 << endl;
64         cout << no2 << endl;
65         cout << no3 << endl;
66     }
67 };

```

```
68
69  int main(void)
70  {
71      base bobj;
72      derived1 dobj1;
73      derived2 dobj2;
74      derived dobj;
75
76      cout << sizeof(bobj) << endl;
77      cout << sizeof(dobj1) << endl;
78      cout << sizeof(dobj2) << endl;
79      cout << sizeof(dobj) << endl;
80
81      dobj.display();
82
83      return 0;
84  }
85
```