

Open employee.cpp Save ~ /C++Lab/ asgn9

```
1 #include <iostream>
2 #include <cstring>
3 using namespace std;
4
5 class Employee
6 {
7     private:
8         string name;
9         int eId;
10    public:
11        Employee(string n = "NULL", int id = 0) : name(n), eId(id) {}
12        void display()
13        {
14            cout << "Employee : " << endl;
15            cout << "Name : " << name << endl;
16            cout << "Employee Id : " << eId << endl;
17        }
18 };
19
20 class Manager : public Employee
21 {
22     private:
23         int mId;
24     public:
25        Manager(string n = "NULL", int eid = 0, int mid = 0) : Employee(n, eid), mId(mid) {}
26        void display()
27        {
28            Employee::display();
29            cout << "Manager : " << endl;
30            cout << "Manager Id : " << mId << endl;
31        }
32 };
33
34 class Director : public Manager
35 {
36     private:
37         int dId;
38     public:
39        Director(string n = "NULL", int eid = 0, int mid = 0, int did = 0) : Manager(n, eid,
40 mid), dId(did) {}
41        void display()
42        {
43            Manager::display();
44            cout << "Director : " << endl;
45            cout << "Director Id : " << dId << endl;
46        }
47 };
48
```

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47 |
48 class Temporary
49 {
50     private:
51         string name;
52         int tId;
53     public:
54         Temporary(string n = "NULL", int id = 0) : name(n), tId(id) {}
55         void display()
56         {
57             cout << "Temporary : " << endl;
58             cout << "Name : " << name << endl;
59             cout << "Temporary Id : " << tId << endl;
60         }
61 };
62
63
64 class Secretary : public Employee
65 {
66     private:
67         int sId;
68     public:
69         Secretary(string n = "NULL", int eid = 0, int sid = 0) : Employee(n, eid), sId(sid) {}
70         void display()
71         {
72             Employee::display();
73             cout << "Secretary : " << endl;
74             cout << "Secretary Id : " << sId << endl;
75         }
76 };
77
78 class Tse : public Temporary, public Secretary
79 {
80     private:
81         int tSId; //temporary secretary Id
82     public:
83         Tse(string en = "NULL", int eid = 0, int sid = 0, string tn = "NULL", int tid = 0, int
tsid = 0) : Secretary(en, eid, sid), Temporary(tn, tid), tSId(tsid) {}
84         void display()
85         {
86             Temporary::display();
87             Secretary::display();
88             cout << "Tse : " << endl;
89             cout << "Tse Id : " << tSId << endl;
90         }
91 };
92
93 class Consultant : public Temporary, public Manager
```

```
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75     }
76 };
77
78 class Tse : public Temporary, public Secretary
79 {
80     private:
81         int tSID;//temporary secretary Id
82     public:
83         Tse(string en = "NULL", int eid = 0, int sid = 0, string tn = "NULL", int tid = 0, int
tsid = 0) : Secretary(en, eid, sid), Temporary(tn, tid), tSID(tsid) {}
84         void display()
85         {
86             Temporary::display();
87             Secretary::display();
88             cout << "Tse : " << endl;
89             cout << "Tse Id : " << tSID << endl;
90         }
91 };
92
93 class Consultant : public Temporary, public Manager
94 {
95     private:
96         int cId;
97     public:
98         Consultant(string tn = "NULL", int tid = 0, string en = "NULL", int eid = 0, int mid =
0, int cid = 0) : Temporary(tn, tid), Manager(en, eid, mid), cId(cid) {}
99         void display()
100         {
101             Temporary::display();
102             Manager::display();
103             cout << "Consultant : " << endl;
104             cout << "Consultant Id : " << cId << endl;
105         }
106 };
107
108 int main()
109 {
110     cout << "Director class " << endl;
111     Director d("Dev1", 123, 234, 456);
112     d.display();
113     cout << endl << "Tse class " << endl;
114     Tse t("Dev2", 987, 876, "Dev3", 765, 654);
115     t.display();
116     cout << endl << "Consultant class " << endl;
117     Consultant c("Dev4", 345, "Dev5", 567, 678, 589);
118     c.display();
119     return 0;
120 }
```

Bracket match found on line: 109

C++ Tab Width: 4

Ln 120, Col 2

INS

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deven@deven-VirtualBox: ~/C++Lab/asn9
deven@deven-VirtualBox: ~/C++Lab/asn9$ g++ employee.cpp
deven@deven-VirtualBox: ~/C++Lab/asn9$ ./a.out
Director class
Employee :
Name : Dev1
Employee Id : 123
Manager :
Manager Id : 234
Director :
Director Id : 456

Tse class
Temporary :
Name : Dev3
Temporary Id : 765
Employee :
Name : Dev2
Employee Id : 987
Secretary :
Secretary Id : 876
Tse :
Tse Id : 654

Consultant class
Temporary :
Name : Dev4
Temporary Id : 345
Employee :
Name : Dev5
Employee Id : 567
Manager :
Manager Id : 678
Consultant :
Consultant Id : 589
deven@deven-VirtualBox: ~/C++Lab/asn9$
```



```
shape.cpp
~/C++Lab/asn9

Open Save

1 #include <iostream>
2 using namespace std;
3
4 class Shape
5 {
6     public:
7         Shape() { cout << "Shape()" << endl; }
8         void draw()
9         {
10             cout << "Shape : Initialize brush" << endl;
11         }
12 };
13
14 class Triangle : public Shape
15 {
16     public:
17         Triangle() { cout << "Triangle()" << endl; } //automatically call shape()
18         void draw()
19         {
20             Shape::draw();
21             cout << "Triangle" << endl;
22         }
23 };
24
25 class RightTriangle : public Triangle
26 {
27     public:
28         RightTriangle() { cout << "Right Triangle()" << endl; }
29         void draw()
30         {
31             Shape::draw();
32             cout << "Right triangle" << endl;
33         }
34 };
35
36 class Quadilateral : public Shape
37 {
38     public:
39         Quadilateral() { cout << "Quadilateral()" << endl; }
40         void draw()
41         {
42             Shape::draw();
43             cout << "Quadilateral : " << endl;
44         }
45 };
46
47 class Rectangle : public Quadilateral
48 {
```

```
shape.cpp
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Open Save

38 public:
39     Quadilateral() { cout << "Quadilateral()" << endl; }
40     void draw()
41     {
42         Shape::draw();
43         cout << "Quadilateral : " << endl;
44     }
45 };
46
47 class Rectangle : public Quadilateral
48 {
49     public:
50     Rectangle() { cout << "Rectangle()" << endl; }
51     void draw()
52     {
53         Shape::draw();
54         cout << "Rectangle" << endl;
55     }
56 };
57
58 class Square : public Rectangle
59 {
60     public:
61     Square() { cout << "Square()" << endl; }
62     void draw()
63     {
64         Shape::draw();
65         cout << "Square" << endl;
66     }
67 };
68
69 int main()
70 {
71     cout << " A triangle " << endl;
72     Triangle t;
73     t.draw();
74     cout << endl << " A right triangle " << endl;
75     RightTriangle rt;
76     rt.draw();
77     cout << endl << " A Rectangle " << endl;
78     Rectangle r;
79     r.draw();
80     cout << endl << " A Square " << endl;
81     Square s;
82     s.draw();
83     cout << endl;
84     return 0;
85 }
```

Bracket match found on line: 70

C++ Tab Width: 4 Ln 85, Col 2 INS

```
deven@deven-VirtualBox: ~/C++Lab/asgn9
deven@deven-VirtualBox: ~/C++Lab/asgn9$ g++ shape.cpp
deven@deven-VirtualBox: ~/C++Lab/asgn9$ ./a.out
A triangle
Shape()
Triangle()
Shape : Initialize brush
Triangle

A right triangle
Shape()
Triangle()
Right Triangle()
Shape : Initialize brush
Right triangle

A Rectangle
Shape()
Quadilateral()
Rectangle()
Shape : Initialize brush
Rectangle

A Square
Shape()
Quadilateral()
Rectangle()
Square()
Shape : Initialize brush
Square

deven@deven-VirtualBox: ~/C++Lab/asgn9$
```