

```
Open  [icon] customer.cpp ~/C++Lab/asgn8 Save [icon] [icon] [icon] [icon]
1 #include <iostream>
2 using namespace std;
3
4 class PersonData
5 {
6     private :
7         string firstName, lastName, address, city, state;
8         int phoneNo;
9     public :
10         PersonData(string &f, string &l, string &a, string &c, string &s, int p) : firstName(f),
            lastName(l), address(a), city(c), state(s), phoneNo(p) {}
11
12         void setFirstName(string &f){ firstName = f; }
13         void setLastName(string &l){ lastName = l; }
14         void setAddress(string &a){ address = a; }
15         void setCity(string &c){ city = c; }
16         void setState(string &s){ state = s; }
17         void setPhoneNo(int p){ phoneNo = p; }
18
19         string getFirstName(){ return firstName; }
20         string getLastName(){ return lastName; }
21         string getAddress(){ return address; }
22         string getCity(){ return city; }
23         string getState(){ return state; }
24         int getPhoneNo(){ return phoneNo; }
25 };
26
27 class CustomerData : public PersonData
28 {
29     private :
30         string emailId;
31         int customerNo;
32     public :
33         CustomerData(string f, string l, string a, string c, string s, int p, string e, int
            cno) : PersonData(f, l, a, c, s, p), emailId(e), customerNo(cno) {}
34
35         void setCustomerNo(int cNo){ customerNo = cNo; }
36         void setEmailId(string &e){ emailId = e; }
37
38         int getCustomerNo(){ return customerNo; }
39         string getEmailId(){ return emailId; }
40 };
41
42 void display(CustomerData &c)//wrote separate fucntion to show the use of get functions
43 {
44     cout << "CustomerData : " << endl << endl;
45     cout << "First Name : " << c.getFirstName() << endl;
46     cout << "Last Name : " << c.getLastName() << endl;
```

```
customer.cpp
~/C++Lab/asn8

33 CustomerData(string f, string l, string a, string c, string s, int p, string e, int
cno) : PersonData(f, l, a, c, s, p), emailId(e), customerNo(cno) {}
34
35 void setCustomerNo(int cNo){ customerNo = cNo; }
36 void setEmailId(string &e){ emailId = e; }
37
38 int getCustomerNo(){ return customerNo; }
39 string getEmailId(){ return emailId; }
40 };
41
42 void display(CustomerData &c)//wrote separate fucntion to show the use of get functions
43 {
44     cout << "CustomerData : " << endl << endl;
45     cout << "First Name : " << c.getFirstName() << endl;
46     cout << "Lirst Name : " << c.getLastName() << endl;
47     cout << "Address : " << c.getAddress() << endl;
48     cout << "City : " << c.getCity() << endl;
49     cout << "State : " << c.getState() << endl;
50     cout << "Phone Number : " << c.getPhoneNo() << endl;
51     cout << "Customer Number : " << c.getCustomerNo() << endl;
52     cout << "Email Id : " << c.getEmailId() << endl;
53 }
54
55 int main()
56 {
57     CustomerData c("Dev", "P", "#389,Basavanagudi", "Bangalore", "Karanataka", 1234567890,
"dev@xyz.com", 2345678);
58     display(c);
59     string s;
60     int n;
61     cout << endl;
62     cout << "Edit : " << endl;
63     cout << "Enter First Name : ";
64     cin >> s;
65     c.setFirstName(s);
66     cout << "Enter Last Name : ";
67     cin >> s;
68     c.setLastName(s);
69     cout << "Enter Email : ";
70     cin >> s;
71     c.setEmailId(s);
72     cout << "Enter Phone Number : ";
73     cin >> n;
74     c.setPhoneNo(n);
75     cout << endl;
76     display(c);
77     return 0;
78 }
```

Bracket match found on line: 56

C++ Tab Width: 4

Ln 78, Col 2

INS

```
deven@deven-VirtualBox: ~/C++Lab/asgn8
deven@deven-VirtualBox: ~/C++Lab/asgn8$ g++ customer.cpp
deven@deven-VirtualBox: ~/C++Lab/asgn8$ ./a.out
CustomerData :

First Name : Dev
Last Name : P
Address : #389,Basavanagudi
City : Bangalore
State : Karnataka
Phone Number : 1234567890
Customer Number : 2345678
Email Id : dev@xyz.com

Edit :
Enter First Name : Deven
Enter Last Name : Paramaj
Enter Email : deven@xyz.com
Enter Phone Number : 0987654321

CustomerData :

First Name : Deven
Last Name : Paramaj
Address : #389,Basavanagudi
City : Bangalore
State : Karnataka
Phone Number : 987654321
Customer Number : 2345678
Email Id : deven@xyz.com
deven@deven-VirtualBox:~/C++Lab/asgn8$
```



```
Open  [icon] employee.cpp ~/C++Lab/asn8 Save [icon] [icon] [icon] [icon]
1 #include <iostream>
2 using namespace std;
3
4 class employee
5 {
6     private:
7         string name;
8         int employeeId;
9         int salary;
10    public:
11        employee(string n = "NULL", int id = 0, int s = 0): name(n), employeeId(id), salary(s){}
12        int getSalary(){ return salary; }
13        void display();
14 };
15
16 void employee::display()
17 {
18     cout << "Employee Details : " << endl;
19     cout << "Name : " << name << endl;
20     cout << "Employee Id : " << employeeId << endl;
21     cout << "Salary : " << salary << endl;
22 }
23
24 class salesPerson : public employee
25 {
26     private:
27         int deptId;
28     public:
29         salesPerson(string n = "NULL", int id = 0, int s = 0, int dId = 0) : employee(n, id, s),
deptId(dId) {}
30         void display();
31 };
32
33 void salesPerson::display()
34 {
35     employee::display();
36     cout << "Department : Sales" << endl;
37     cout << "Department Id : " << deptId << endl;
38 }
39
40 class fullTimeSalesPerson : public salesPerson
41 {
42     private:
43         int bonus, workHours;
44     public:
45         fullTimeSalesPerson(string n = "NULL", int id = 0, int s = 0, int dId = 0) :
salesPerson(n, id, s, dId)
46 {
```

```
Open  [icon] employee.cpp ~\C++Lab\asgn8 Save [icon] [icon] [icon] [icon]
44 | public:
45 |     fullTimeSalesPerson(string n = "NULL", int id = 0, int s = 0, int dId = 0) :
    | salesPerson(n, id, s, dId)
46 |     {
47 |         bonus = static_cast<float>(getSalary() * 10) / 100;
48 |         workHours = 10;
49 |     }
50 |     void display();
51 | };
52 |
53 | void fullTimeSalesPerson::display()
54 | {
55 |     salesPerson::display();
56 |     cout << "Type : Full Time" << endl;
57 |     cout << "Bonus : " << bonus << endl;
58 |     cout << "Work Hours : " << workHours << endl << endl;
59 | }
60 |
61 | class halfTimeSalesPerson : public salesPerson
62 | {
63 |     private:
64 |         int workHours;
65 |         float bonus;
66 |     public:
67 |         halfTimeSalesPerson(string n = "NULL", int id = 0, int s = 0, int dId = 0) :
    | salesPerson(n, id, s, dId)
68 |         {
69 |             bonus = static_cast<float>(getSalary() * 7) / 100;
70 |             workHours = 5;
71 |         }
72 |         void display();
73 | };
74 |
75 | void halfTimeSalesPerson::display()
76 | {
77 |     salesPerson::display();
78 |     cout << "Type : Half Time" << endl;
79 |     cout << "Bonus : " << bonus << endl;
80 |     cout << "Work Hours : " << workHours << endl << endl;
81 | }
82 |
83 | int main()
84 | {
85 |     fullTimeSalesPerson f("Dev1", 12345, 20000, 7890);
86 |     f.display();
87 |     halfTimeSalesPerson h("Dev2", 34567, 10000, 4574);
88 |     h.display();
89 |     return 0;

```

```
deven@deven-VirtualBox: ~/C++Lab/asgn8
deven@deven-VirtualBox: ~/C++Lab/asgn8$ g++ employee.cpp
deven@deven-VirtualBox: ~/C++Lab/asgn8$ ./a.out
Employee Details :
Name : Dev1
Employee Id : 12345
Salary : 20000
Department : Sales
Department Id : 7890
Type : Full Time
Bonus : 2000
Work Hours : 10

Employee Details :
Name : Dev2
Employee Id : 34567
Salary : 10000
Department : Sales
Department Id : 4574
Type : Half Time
Bonus : 700
Work Hours : 5

deven@deven-VirtualBox: ~/C++Lab/asgn8$
```

```
Open  office.cpp  Save  -  □  ×
~/C++Lab/asn8

1 #include <iostream>
2 using namespace std;
3
4 class Person
5 {
6     private :
7         string name;
8         int phoneNo;
9     public :
10        Person(string &n, int p) : name(n), phoneNo(p) {}
11        void display()
12        {
13            cout << "Name : " << name << endl << "Phone Number : " << phoneNo << endl;
14        }
15 };
16
17 class Faculty : public Person
18 {
19     private :
20         int facultyNo;
21     public :
22        Faculty(string n, int p, int fno) : Person(n, p), facultyNo(fno) {}
23        void display()
24        {
25            cout << "Faculty : " << endl;
26            Person::display();
27            cout << "Faculty Number : " << facultyNo << endl << endl;
28        }
29 };
30
31 class NonTeachingStaff : public Person
32 {
33     private :
34         int nonTeachingStaffNo;
35     public :
36        NonTeachingStaff(string n, int p, int no) : Person(n, p), nonTeachingStaffNo(no) {}
37        void display()
38        {
39            cout << "Non Teaching Staff : " << endl;
40            Person::display();
41            cout << "Non Teaching Staff Number : " << nonTeachingStaffNo << endl << endl;
42        }
43 };
44
45 class OfficeStaff : public Person
46 {
47     private :
48         int officeStaffNo;
```



```
Open office.cpp Save
~/C++Lab/asgn8

21 public :
22     Faculty(string n, int p, int fno) : Person(n, p), facultyNo(fno) {}
23     void display()
24     {
25         cout << "Faculty : " << endl;
26         Person::display();
27         cout << "Faculty Number : " << facultyNo << endl << endl;
28     }
29 };
30
31 class NonTeachingStaff : public Person
32 {
33     private :
34         int nonTeachingStaffNo;
35     public :
36         NonTeachingStaff(string n, int p, int no) : Person(n, p), nonTeachingStaffNo(no) {}
37         void display()
38         {
39             cout << "Non Teaching Staff : " << endl;
40             Person::display();
41             cout << "Non Teaching Staff Number : " << nonTeachingStaffNo << endl << endl;
42         }
43 };
44
45 class OfficeStaff : public Person
46 {
47     private :
48         int officeStaffNo;
49     public :
50         OfficeStaff(string n, int p, int no) : Person(n, p), officeStaffNo(no) {}
51         void display()
52         {
53             cout << "Office Staff : " << endl;
54             Person::display();
55             cout << "Office Staff Number : " << officeStaffNo << endl << endl;
56         }
57 };
58
59 int main()
60 {
61     Faculty f("A", 12345, 987);
62     NonTeachingStaff n("B", 23456, 345);
63     OfficeStaff o("C", 34567, 567);
64     f.display();
65     n.display();
66     o.display();
67     return 0;
68 }
```

Bracket match found on line: 60

C++ Tab Width: 4 Ln 68, Col 2 INS


```
deven@deven-VirtualBox: ~/C++Lab/asgn8
deven@deven-VirtualBox: ~/C++Lab/asgn8$ g++ office.cpp
deven@deven-VirtualBox: ~/C++Lab/asgn8$ ./a.out
Faculty :
Name : A
Phone Number : 12345
Faculty Number : 987

Non Teaching Staff :
Name : B
Phone Number : 23456
Non Teaching Staff Number : 345

Office Staff :
Name : C
Phone Number : 34567
Office Staff Number : 567

deven@deven-VirtualBox: ~/C++Lab/asgn8$
```