

```
1 #include <iostream>
2 #include <string>
3 #include <iomanip>
4 using namespace std;
5
6 class Employee
7 {
8 private:
9     string name;
10    string number;
11    string hireDate;
12
13 public:
14    Employee()
15    {
16        name = "";
17        number = "";
18        hireDate = "";
19    }
20    Employee(string aName, string aNumber, string aDate)
21    {
22        name = aName;
23        number = aNumber;
24        hireDate = aDate;
25    }
26    void setName(string n)
27    {
28        name = n;
29    }
30    void setNumber(string num)
31    {
32        number = num;
33    }
34    void setHireDate(string date)
35    {
36        hireDate = date;
37    }
38    string getName() const
39    {
40        return name;
41    }
42    string getNumber() const
43    {
44        return number;
45    }
46    string getHireDate() const
47    {
48        return hireDate;
49    }
```

```
50 };
51 class ProductionWorker : public Employee
52 {
53 private:
54     int shift;
55     double payRate;
56 public:
57     ProductionWorker() : Employee()
58     {
59         shift = 0;
60         payRate = 0.0;
61     }
62     ProductionWorker(string aName, string aNumber, string aDate,
63         int aShift, double aPayRate) : Employee(aName, aNumber, aDate)
64     {
65         shift = aShift;
66         payRate = aPayRate;
67     }
68     void setShift(int s)
69     {
70         shift = s;
71     }
72
73     void setPayRate(double r)
74     {
75         payRate = r;
76     }
77     int getShiftNumber() const
78     {
79         return shift;
80     }
81     string getShiftName() const
82     {
83         if (shift == 1)
84             return "Day";
85         else if (shift == 2)
86             return "Night";
87         else
88             return "Invalid";
89     }
90     double getPayRate() const
91     {
92         return payRate;
93     }
94 };
95
96 void displayInfo(ProductionWorker);
97
98 int main()
```

```
99 {
100     ProductionWorker pw("John Jones", "123", "10/12/2010", 2, 18.00);
101     displayInfo(pw);
102     return 0;
103 }
104 void displayInfo(ProductionWorker e)
105 {
106     cout << setprecision(2) << fixed << showpoint;
107     cout << "Name: "
108         << e.getName() << endl;
109     cout << "Employee number: "
110         << e.getNumber() << endl;
111     cout << "Hire date: "
112         << e.getHireDate() << endl;
113     cout << "Shift: "
114         << e.getShiftName() << endl;
115     cout << "Shift number: "
116         << e.getShiftNumber() << endl;
117     cout << "Pay rate: "
118         << e.getPayRate() << endl;
119 }
120
```