```
1
 2 #ifndef MYHEADER_H_
 3 #define MYHEADER_H_
 5 //Preprocessor directives
 7 #include<iostream> //for input and output
 8 #include<iomanip> //for output style
 9 #include<string> //for using string
10
11 //using the name space standard
12 using namespace std;
13
14
15 //class date: for defining the date
16 class date
17 {
18 //public parts containing the method functions of the class
19 public:
20
21
      //default constructor
22
      date();
23
24
      //destructor
25
      ~date();
26
27 //protected attributes of the class (accessible by derived classes)
28 protected:
29
      int month; //PROCESS - for storing month
      int day;//PROCESS - for storing day
30
      int year; //PROCESS - for storing year
31
32 };
33
34
35 //Class employee(derived from the class date):
36 //for setting and changing the attributes about the employees
37 class employee: protected date
38 {
39 //public parts containing the method functions of the class
40 public:
      //default constructor
41
42
      employee();
43
44
45
      //destructor
46
      ~employee();
47
48
      //method function for setting the name
49
      void setName(string empName);
50
51
      //method function for setting the Id
      void setId(string empId);
52
53
54
      //method function for setting the phone number
55
      void setPhoneNumber(string Number);
```

```
56
       //method function for setting the age
 57
 58
       void setAge(int empAge);
 59
       //method function for setting the gender
 60
 61
       void setGender(char sex);
 62
 63
       //method function for setting the job title
 64
       void setJobTitle(string title);
 65
 66
       //method function for setting the salary
       void setSalary(double income);
 67
 68
 69
       //method function for setting the hire date
 70
       void setDate(int startDay, int startMonth, int startYear);
 71
 72
       //method function for printing the attributes of the class
 73
       void print();
 74
 75//protected attributes of the class (accessible by derived classes)
 76 protected:
 77
       string name;
                            //PROCESS - storing the name
       string id;
                            //PROCESS - storing the id number
 78
 79
                            //PROCESS - storing the phone number
       string phoneNum;
 80
                        //PROCESS - storing the age
                age;
                        //PROCESS - storing the gender
 81
       chargender;
 82
       string jobTitle;
                            //PROCESS - storing the job title
 83
       double salary;
                            //PROCESS - storing the salary
 84
       datestartDate; //PROCESS - storing the hire date
 85 };
 86
 87 //class programmer(derived from the class employee):
 88 //for setting and changing the attributes about the programmer
 89 class programmer: protected employee
 90 {
 91//public parts containing the method functions of the class
 92 public:
 93
       //default constructor
 94
       programmer();
 95
 96
 97
       //destructor
 98
       ~programmer();
 99
100
       //method for setting the department number
101
       void setDepartmentNum(string depNum);
102
103
       //method for setting the supervisor's name
104
       void setSupName(string supervisor);
105
106
       //method for setting the salary increase percentage
       void setPercentage(int percent);
107
108
109
       //method for setting if the person knows c++
110
       void cppIdentifier(bool cppIdent);
```

```
111
112
       //method for setting if the person knows java
113
       void javaIdentifier(bool javaIdent);
114
115
       //method for printing the attributes of the class
116
       void printProgrammer();
117
118 //private part of the class; containing the attributes of the class
119 private:
120
       string depNumber;
                                //PROCESS - storing the department number
121
                            //PROCESS - storing the supervisor's name
       string
               supName:
                percSalaryInc; //PROCESS - storing the salary increase percentage
122
       float
123
                        //PROCESS - storing if the person knows c++
       boolcpp;
124
       booljava;
                            //PROCESS - storing if the person knows java
125
126 };
127
128 //class softArch(derived from the class employee):
129 //for setting and changing the attributes about the software Architects
130 class softArch: protected employee
131 {
132 //public parts containing the method functions of the class
133 public:
134
135
       //default constructor
136
       softArch():
137
138
       //destructor
139
       ~softArch();
140
141
       //method for setting the department number
       void setDepartmentNum(string departmnet);
142
143
144
       //method for setting the supervisors name
145
       void setSupName(string supervisor);
146
       //method for setting the salary increase percentage
147
148
       void setPercentage(float percent);
149
150
       //method for setting the experience
151
       void setExperience(int empYears);
152
153
       //method for printing the attributes of the class
154
       void printSoftArch();
155
156 //private part of the class; containing the attributes of the class
157 private:
       string depNumber;
                                //PROCESS - storing the department number
158
                            //PROCESS - storing the supervisor's name
159
       string
                supName:
160
       float
                percSalaryInc; //PROCESS - storing the salary increase percentage
                                //PROCESS - storing the experience
161
       int
                experience;
162 };
163
164
165
```

```
166 #endif /* MYHEADER_H_ */
167
168
169
```