## Lab7

1. **Description of the Problem**

Create a class called Employee that includes three pieces of information as data members—a first name, a last name and a monthly salary. Your class should have a constructor that initializes the three data members. Provide a set and a get function for each data member. Write a test program that demonstrates class Employee’s capabilities. Create two Employee objects and display each object’s yearly salary. Then give each Employee a 10 percent raise and display each Employee’s yearly salary again.

**Sample Output**

|  |
| --- |
| Employee 1: Bob Jones; Yearly Salary: 34500  Employee 2: Susan Baker; Yearly Salary: 37800  Increasing employee salaries by 10%  Employee 1: Bob Jones; Yearly Salary: 37944  Employee 2: Susan Baker; Yearly Salary: 41580 |

注意：检查设置set()的有效范围。

2. Create a class calles **Date** that includes three piece of information as data members-a year,a month and a day. Your class should have a constructor with three parameters to initialize the three data members. Provide a member function **displayDate** that display the month, day and year separated by forward slashes (/). Write a test program that demonstrates class **Date**’s capabilities.

**Sample Output**

|  |
| --- |
| Please enter Year Month Day  2006 12 08  Date is : 12/08/2006 |

注意：日期有效性检查

1. 实现一个简单的菜单程序，实现数据的增加、删除和排序。运行时显示“Menu: A(dd) D(elete) S(ort) Q(uit), Select one:” 提示用户输入，A表示增加，D表示删除，S表示排序，Q表示退出。输入为A、D、S时分别提示“数据已经增加、删除、排序.”，输入为Q时程序结束。
2. **Description of the Problem**

Write a program that simulates the rolling of two dice. The program should call rand to roll the first dice, and should call rand again to roll the second dice. The sum of the two values should then be calculated. Your program should roll the two dice 36,000 times. Print the results in a tabular format.

**Sample Output**

|  |
| --- |
| Sum Total Actual  2 1000 2.778%  3 1958 5.439%  4 3048 8.467%  5 3979 11.053%  6 5007 13.908%  7 6087 16.908%  8 4996 13.878%  9 3971 11.031%  10 2996 8.322%  11 2008 5.578%  12 950 2.639% |

提交时间：1月9日（星期二）19：00点之前

提交要求: 每题提交源文件(只要 .cpp文件，不要工程) 及运行结果图片，以学号\_姓名命名打包成一个文件发送到937850122@qq.com; 注意代码规范性，多使用注释，规范变量名，增加代码易读性， 尽可能地优化类与函数的设计。