**BO1000. multiple inheritance**

**Description**

写作和赛车是韩少的两大最爱，但在生活的不同时期还是要有所取舍。

韩少的原则是：

周末：写作优先； 周内：赛车优先；

这些可以提现在Weekend和Workday的对象构造中，类继承关系如下：

Racing            Writing

    \                       /

  Weekend/Workday

其中Racing和Writing如下：

class Writing  
{  
public:  
 Writing(){cout<<"Writing constructor"<<endl;}  
 ~Writing(){cout<<"~Writing"<<endl;}  
};

class Racing  
{  
public:  
 Racing(){cout<<"Racing constructor"<<endl;}  
 ~Racing(){cout<<"~Racing"<<endl;}  
};

主函数如下：

int main()  
{  
 {  
 Weekend end;  
 Workday day;  
}  
}

如何使得输出为：

Writing constructor  
Racing constructor  
Weekend constructor  
Racing constructor  
Writing constructor  
Workday constructor  
~Workday  
~Writing  
~Racing  
~Weekend  
~Racing  
~Writing

**Input**

none

**Output**

Writing constructor  
Racing constructor  
Weekend constructor  
Racing constructor  
Writing constructor  
Workday constructor  
~Workday  
~Writing  
~Racing  
~Weekend  
~Racing  
~Writing

**Sample Output**

Writing constructor

Racing constructor

Weekend constructor

Racing constructor

Writing constructor

Workday constructor

~Workday

~Writing

~Racing

~Weekend

~Racing

~Writing

**Hint**

提交main函数之外的所有类

**BO1001. Format the book list**

**Description**

Write  a program to read a list containing item name, item code, and cost interactively and produce a three column output satisfied:

1. name and code are left-justified
2. cost is right-justified with a precision of two digits, Trailing zeros are shown
3. the size  for each item ocupatation are 15, 15, 10

**Input**

First Line is an interger N to specify the number of books, following with N lines , for each line contains the name ,code and cost.

**Output**

for each item output them satisfied the description above

**Sample Input**

http://soj.sysu.edu.cn/images/clipboard.jpgCopy sample input to clipboard

3

book1 2312123 342.13

book2 342 123

book3 342 1.2321

**Sample Output**

book1 2312123 342.13

book2 342 123.00

book3 342 1.23

**Hint**

the code is of string type

**BO1002. format the book list again~**

**Description**

My books want to have different kinds of formats of a booklist. To improve the reuseability of the code, we should use the object-oriated thought. I design the class Book as below:

 class Book  
{  
 string name;  
 string code;  
  double cost;  
public:  
 Book(string s,string c,double co):name(s),code(c),cost(co){}  
  
};

Different from last book list format demand. the width for name, code and cost are of the same value: 15.

The main function is :

int main() {  
    int N;  
    string name;  
    string code;  
    double cost;  
    cin >> N;  
    int i = 0;  
    Book \*books[N];  
     for(i=0;i<N;i++){  
        cin >> name >> code >> cost;  
        books[i] = new Book(name, code, cost);  
    }  
    for(i=0;i<N;i++){  
        cout << "-----:" << \*books[i];  
    }  
    for(i=0;i<N;i++){  
        cout << leftform << \*books[i];  
    }  
    for(i=0;i<N;i++){  
        cout << rightform << \*books[i];  
    }  
  
}

**Input**

First line is the integer N. following with N lines, and for each line containing the name, code and cost.

**Output**

Refer to the main function and the sample output

**Sample Input**

http://soj.sysu.edu.cn/images/clipboard.jpgCopy sample input to clipboard

3

book1 123456 342.13

book2 456789 23

book3 789123 1.2321

**Sample Output**

-----: book1 123456 342.130000

-----: book2 456789 23.000000

-----: book3 789123 1.232100

left :book1 123456 342.13

left :book2 456789 23.00

left :book3 789123 1.23

right: book1 123456 342.13

right: book2 456789 23.00

right: book3 789123 1.23

**Hint**

**default << should also set out.setf(ios::showpoint);        out<<setiosflags(ios::fixed);**

Different from last book list format demand. the width for name, code and cost are of the same value: 15.

Designing your own manipulators.

**BO1003. Seperate by \***

**Description**

I want to seperate my input data by \*. and then output each item .

**Input**

First Line is an integer N to specify the number of item i will seperate.

then is the input data containing at least N \*.

**Output**

output the first N items

**Sample Input**

http://soj.sysu.edu.cn/images/clipboard.jpgCopy sample input to clipboard

3

testtest\* testtesttest

test\*

test test\*

**Sample Output**

testtest

testtesttest

test

test test

**Hint**

item may include space or return

**BO1004. 不使用循环**

**Description**

编写程序，不使用任何循环，完成输入数字n, 使用星号的直方图表示出这些值。

第一行是待转换的数字的个数M。

例如输入：

5

5 7 2 10 4

则输出：

5:\*\*\*\*\*  
7:\*\*\*\*\*\*\*  
2:\*\*  
10:\*\*\*\*\*\*\*\*\*\*  
4:\*\*\*\*

要求： 在进行直方图转换的时候不允许用循环语句！！

**Input**

第一行是整数M，代表要输入的个数。

接下来的M个整数。

**Output**

将每个整数输出成\*直方图的形式。

**Sample Input**

http://soj.sysu.edu.cn/images/clipboard.jpgCopy sample input to clipboard

5

5 7 2 10 4

**Sample Output**

5:\*\*\*\*\*

7:\*\*\*\*\*\*\*

2:\*\*

10:\*\*\*\*\*\*\*\*\*\*

4:\*\*\*\*

**BO1005. 设置输出的flag**

**Description**

将输入的数按照系统默认格式，定点格式显示浮点数。

**Input**

第一行N代表接下来会有N个cases。

接下来N行中，每行包含一个浮点数。

**Output**

对每个浮点数按照 系统默认格式，定点格式分行显示。

**Sample Input**

http://soj.sysu.edu.cn/images/clipboard.jpgCopy sample input to clipboard

4

2123.324423

2123.324423

2123.324423

123.0000

**Sample Output**

2123.32

2123.324423

2123.32

2123.324423

2123.32

2123.324423

123

123.000000

**Hint**

重设格式