

Data Structure Assignment 4(Programming Homework)

這次的題目是利用 Linked-list 這種資料結構來解決第二章的 Sparse Matrix 相乘的問題。

請各位同學謹記 Linked-list 這種資料結構的”好處”,千萬“不要”串一堆 0 在你的 linked-list 裡面。

請在你的程式碼內加上註解(讓助教看懂你在寫什麼是很重要的)並在 Readme 檔內說明清楚你的做法~

題目 Input 為一個 $m \times n$ 矩陣跟一個 $n \times p$ 矩陣, Output 應為一個 $m \times p$ 矩陣。

每個 input 數字之間是由一個半形空格或'\n'隔開。

(The homework is the same problem in Chap.2 – Sparse matrix multiplication.

But the data structure you should use is “Linked list”.

Please leave comments in your source code and briefly explain your program in your README FILE.

The Input is one $m \times n$ matrix and one $n \times p$ matrix. The output should be one $m \times p$ matrix.

Between the input numbers may be a blank or a '\n') 。

Example input:

```
2
3
1 0 0
2 3 0
3
2
9 8
0 7
0 0
```

Example output :

```
9 8
18 37
```

General Information:

- **Deadline : 2015/11/20 23:59.**
- **Upload your assignment to Moodle system.**
- **Upload file format: Student-Id_Name.rar , Ex.P76991094_王小明.rar**
- **Your file should consist of the following items:**
- **Source Code**
- **Readme file (Program description)**
- **Any copies will be scored as zero.Do not plagiarize!!!**
- **Late homework will not be accepted.**
- **Source code format: .c/.cpp (do NOT save your code in a .txt or PDF file)**