```
//
//  main.cpp
//  Professor
//

#include <iostream>
#include "Professor.h"

int main(int argc, const char * argv[])
{
    Professor layton;

    for (int x = 0; x < 10; x++)
    {
        layton.PrepareMaterial(1, x+1);
    }
    for (int x = 0; x < 10; x++)
    {
        layton.Teach(1, x+1);
    }
    return 0;
}
//
//  Professor.h
//  Professor
//

#ifndef __Professor__Professor__
#define __Professor__Professor__

#include <iostream>

const int memoryLimit = 5;

class Professor {
public:
    Professor();
    void PrepareMaterial(int chapter, int section);
    void Teach(int chapter, int section);
private:
    struct material {
        int chapter;
        int section;
    };
    material m[memoryLimit];
    int currentIndex;
    int itemsLearned;
};

#endif /* defined(__Professor__Professor__) */
```

```
//
//  Professor.cpp
//  Professor
//

#include "Professor.h"

Professor::Professor()
{
    currentIndex = 0;
    itemsLearned = 0;
}

void Professor::PrepareMaterial(int chapter, int section)
{
    m[currentIndex] = {chapter, section};
    if (itemsLearned < memoryLimit)
        itemsLearned++;
    currentIndex = (currentIndex+1)%memoryLimit;
}

void Professor::Teach(int chapter, int section)
{
    for (int x = 0; x < itemsLearned; x++)
    {
        if (m[x].chapter == chapter && m[x].section == section)
        {
            std::cout << "Teaching chapter " << m[x].chapter << "
section " << m[x].section << std::endl;
            return;
        }
    }
    std::cout << "Blah, blah, blah" << std::endl;
}
```