

Homework 6

Computer Programming (II) Spring Semester, 2021

Please modify the following program so that (1) each time the user types 1, the program outputs "Eating dessert", (2) each time the user types 2, the program outputs "Writing using a pen", and (3) the destructors of Dessert and Pen get called upon program termination:

```
#include <iostream>
using namespace std;

class Dessert
{
public:
    ~Dessert() { cout << "Dessert destructor\n"; }
    void eat() { cout << "Eating dessert\n"; };
};

class Pen
{
public:
    ~Pen() { cout << "Pen destructor\n"; }
    void write() { cout << "Writing using a pen\n"; }
};

int main()
{
    MySmartPointer< Dessert > myMealPtr( new Dessert );
    MySmartPointer< Pen > myPenPtr( new Pen );
    char choice;

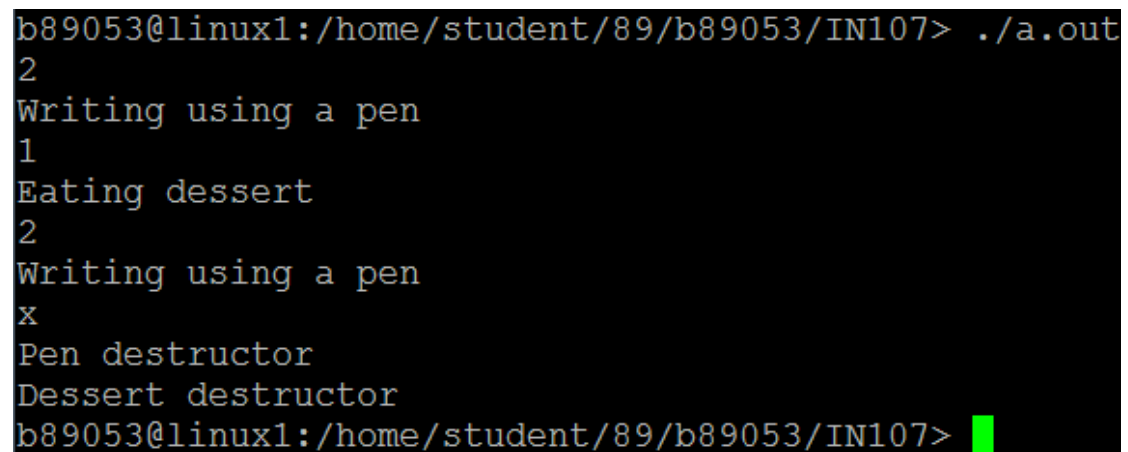
    while ( cin >> choice )
    {
        switch ( choice )
        {
            case '1':
```

```
        myMealPtr->eat();
        break;
    case '2':
        ( *myPenPtr ).write();
        break;
    default:
        return 0;
    }
}
}
```

Additional requirement:

Please leave intact the main function, Dessert class and Pen class.

My Screenshot



```
b89053@linux1:/home/student/89/b89053/IN107> ./a.out
2
Writing using a pen
1
Eating dessert
2
Writing using a pen
x
Pen destructor
Dessert destructor
b89053@linux1:/home/student/89/b89053/IN107> █
```