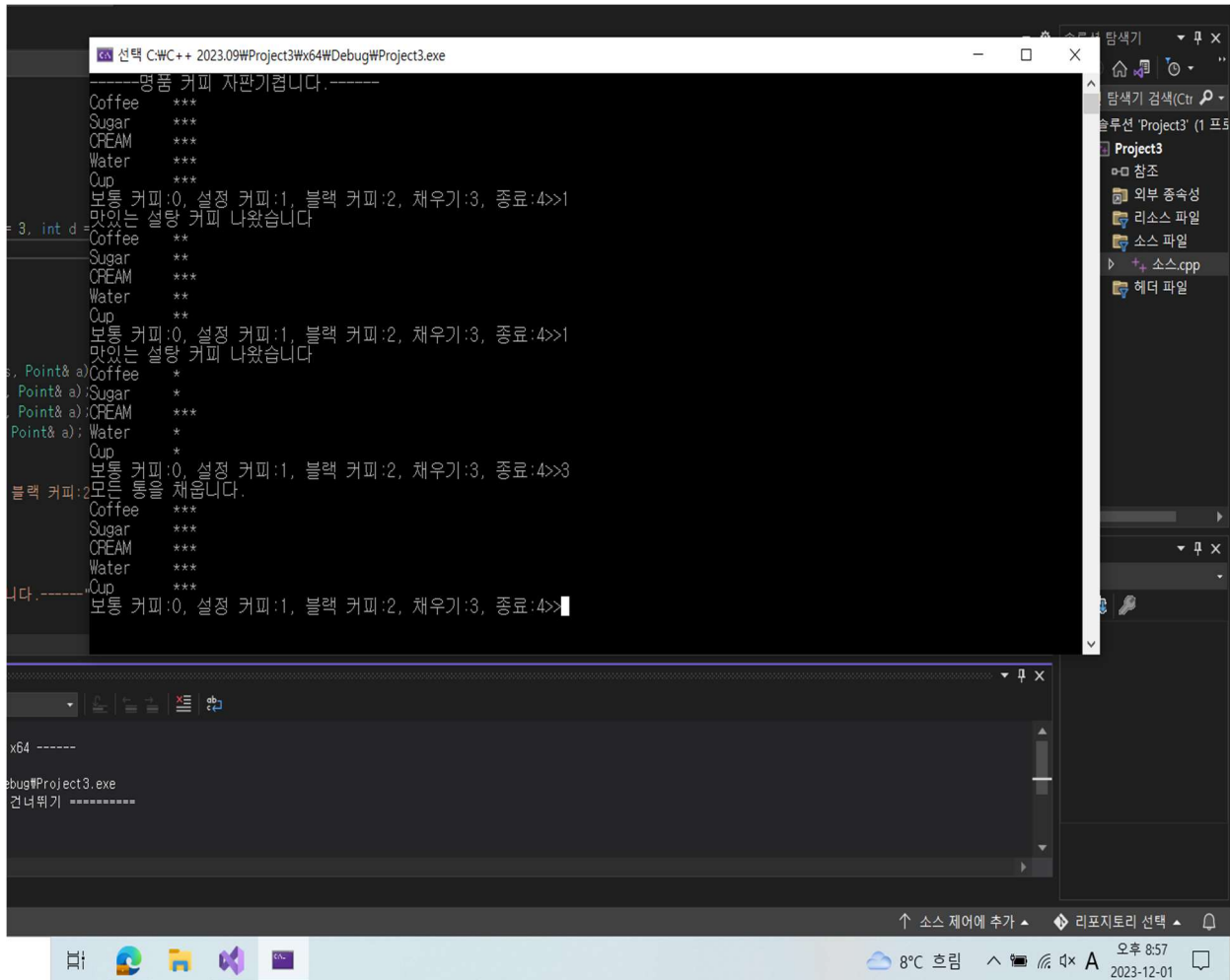


과제 #4

13조 (전대원, 소재현)

코드 실행결과



```
선택 C:\#C++ 2023.09\Project3\Debug\Project3.exe
-----명품 커피 자판기입니다.-----
Coffee ***
Sugar ***
CREAM ***
Water ***
Cup ***
보통 커피:0, 설탕 커피:1, 블랙 커피:2, 채우기:3, 종료:4>>1
맛있는 설탕 커피 나왔습니다
Coffee **
Sugar **
CREAM ***
Water **
Cup **
보통 커피:0, 설탕 커피:1, 블랙 커피:2, 채우기:3, 종료:4>>1
맛있는 설탕 커피 나왔습니다
Point&a)Coffee *
Point&a)Sugar *
Point&a)CREAM ***
Point&a)Water *
Cup *
보통 커피:0, 설탕 커피:1, 블랙 커피:2, 채우기:3, 종료:4>>3
블랙 커피:2 모든 통을 채웁니다.
Coffee ***
Sugar ***
CREAM ***
Water ***
Cup ***
다.-----
보통 커피:0, 설탕 커피:1, 블랙 커피:2, 채우기:3, 종료:4>>
```

코드

```
#include <iostream>
#include <iomanip>

using namespace std;
class Point {
    int a, b, c, d, e;
public:
    Point(int a = 3, int b = 3, int c = 3, int d = 3, int e = 3) {
        this->a = a; this->b = b;
```

```

        this->c = c;
        this->d = d;
        this->e = e;
    }
    friend void run(Point& a);
    friend ostream& coffee(ostream& ins, Point& a);
    friend ostream& sugar(ostream& ins, Point& a);
    friend ostream& black(ostream& ins, Point& a);
    friend ostream& fill(ostream& ins, Point& a);
};

istream& question(istream& ins) {
    cout << "보통 커피:0, 설정 커피:1, 블랙 커피:2, 채우기:3, 종료:4>>";
    return ins;
}

int main() {
    Point a;
    cout << ("-----명품 커피 자판기입니다.-----") << endl;
    run(a);
}

void run(Point& a) {
    while (true) {
        cout << left << setw(10) << "Coffee" << right << string(a.a, '*') << endl;
        cout << left << setw(10) << "Sugar" << right << string(a.b, '*') << endl;
        cout << left << setw(10) << "CREAM" << right << string(a.c, '*') << endl;
        cout << left << setw(10) << "Water" << right << string(a.d, '*') << endl;
        cout << left << setw(10) << "Cup" << right << string(a.e, '*') << endl;

        int answer;
        cin >> question >> answer;
        if ((a.a == 0 || a.b == 0 || a.c == 0 || a.d == 0 || a.e == 0) && (answer == 0 ||
answer == 1 || answer == 2))
        {
            cout << "재료가 없습니다." << endl;
            run(a);
            return;
        }
        if (answer == 0)
            coffee(cout, a);
        if (answer == 1)
            sugar(cout, a);
        if (answer == 2)
            black(cout, a);
        if (answer == 3)
            fill(cout, a);
        if (answer == 4)
            break;
    }
}

ostream& coffee(ostream& ins, Point& a) {
    ins << "맛있는 커피 나왔습니다" << endl;
    a.a--;
    a.b--;

```

```
        a.c--;
        a.d--;
        a.e--;
        return ins;
    }
    ostream& sugar(ostream& ins, Point& a) {
        ins << "맛있는 설탕 커피 나왔습니다" << endl;
        a.a--;
        a.b--;
        a.d--;
        a.e--;
        return ins;
    }
    ostream& black(ostream& ins, Point& a) {
        ins << "맛있는 블랙 커피 나왔습니다" << endl;
        a.a--;
        a.c--;
        a.d--;
        a.e--;
        return ins;
    }
    ostream& fill(ostream& ins, Point& a) {
        ins << "모든 통을 채웁니다." << endl;
        a.a = 3;
        a.b = 3;
        a.c = 3;
        a.d = 3;
        a.e = 3;
        return ins;
    }
}
```