

Computer Programming (II)

Homework 1

Problem Statement

Please add two classes—Dessert and Suncake—to the program below so as to meet the following requirements:

- Each time the user types 1, the program outputs
The initial weight is 100
The remaining weight is 80
- Each time the user types 2, the program outputs
The initial weight is 100
Adding milk...
The remaining weight is 80
- Upon reaching EOF, the program terminates.

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

```
int main()
{
    Dessert *d;
    int choice;

    while ( cin >> choice )
    {
        switch ( choice )
        {
            case 1:
                d = new Dessert();
                break;
            case 2:
                d = new Suncake();
                break;
            default:
                exit( 1 );
        }
    }
}
```

```

    cout << "The initial weight is " << d->getWeight() << '\n';
    d->eat();
    cout << "The remaining weight is " << d->getWeight() << "\n\n";
    delete d;
}

```

```

const Dessert *ptr = new Dessert;

```

```

ptr->getWeight();
delete ptr;
}

```

Please leave the main function intact. Furthermore, Suncake::eat() should call Dessert::eat(). For reasons to be detailed later in class, Dessert should have a virtual destructor such as

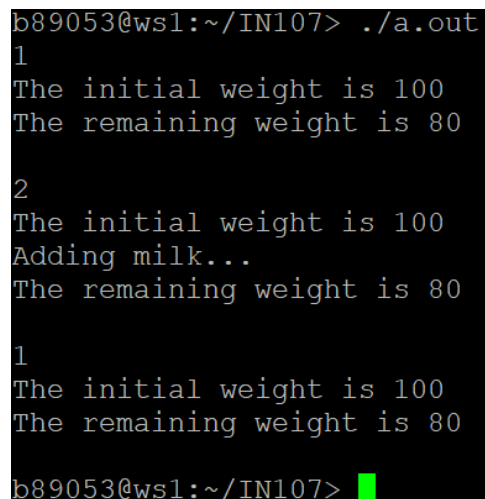
```

virtual ~Dessert() {}

```

Please do not have public data member(s) in Dessert.

My Screenshot



```

b89053@ws1:~/IN107> ./a.out
1
The initial weight is 100
The remaining weight is 80

2
The initial weight is 100
Adding milk...
The remaining weight is 80

1
The initial weight is 100
The remaining weight is 80
b89053@ws1:~/IN107>

```