Download and Extract

An initial setup of files is provided to you via a shell script: [Download potd-q5](#)

Using a terminal, extract the initial files by running the shell script you just downloaded (you will need to navigate to the directory where you saved the file):

```
sh potd-q5.sh
```

Your files for this problem will be in the `potd-q5` directory.

The Problem

Create a program using a new class you create!

First, write a `Food` class:

- Write a class `Food` that has two private member variables: `name_` and `quantity_`.
- Write the functions to access those private member variables. Call them `get_name`, `set_name`, `get_quantity`, and `set_quantity`.
- Write the default constructor.

Now, work on a simple `q5.cpp`:

- Write a function `increase_quantity` in `q5.cpp` (not part of the class `Food`) which increases the quantity of a food by one.
- This function should be called by passing a `Food` object **by pointer**.

Finally, in `main.cpp`, write your `main` function:

- Creates an instance of the `Food` class:
- print out the quantity of food,
- call `increase_quantity` on it, and
- print out the new quantity

Sample Output
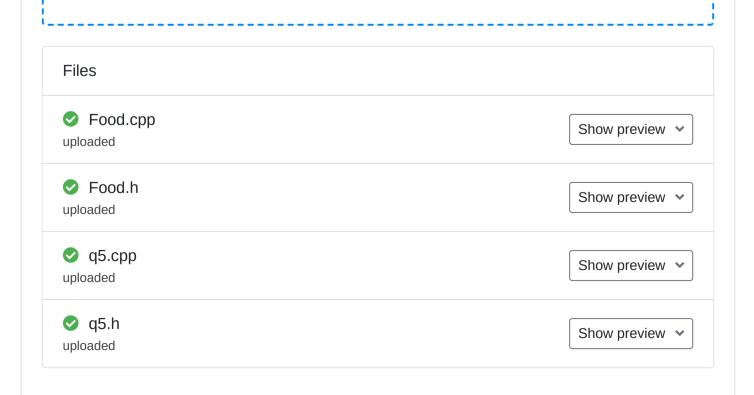
There are many correct outputs, one correct output is the following:

```
You have 5 apples.
You have 6 apples.
```

Upload Solution

Drop files here or click to upload.

Only the files listed below will be accepted—others will be ignored.

Files

✅ Food.cpp
uploaded

Show preview ⌄

✅ Food.h
uploaded

Show preview ⌄

✅ q5.cpp
uploaded

Show preview ⌄

✅ q5.h
uploaded

Show preview ⌄

POTD 5

Total points:	1/1
Score:	100%

Question

Value:	1
History:	1
Awarded points:	1/1

Report an error in this question

Previous question

Next question

Save & Grade	Save only

Submitted answer [correct: 100%]

Submitted at 2019-01-28 10:40:07 (CST)

[i]   [hide ^]

Files

✅ **Food.cpp**
uploaded
[Show preview ⌄]

✅ **Food.h**
uploaded
[Show preview ⌄]

✅ **q5.cpp**
uploaded
[Show preview ⌄]

✅ **q5.h**
uploaded
[Show preview ⌄]

Score: 3/3 (100%)

Test Results

✔ **[1/1] Test that set_name and get_name work.** ⌄

✔ **[1/1] Test that set_quantity and get_quantity work.** ⌄

✔ **[1/1] Test that increase_quantity works.** ⌄