

Download and Extract

An initial setup of files is provided to you via a shell script: [Download potd-q8](#)

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-q8.sh
```

Your files for this problem will be in the `potd-q8` directory.

The Problem

The game of chess is made up of a board and pieces of different types and colors. Two different classes exist in this problem:

- `Piece`, a class representing a generic chess piece
- `Queen`, a class representing a queen

First, modify the `Queen` class so that it extends the `Piece` class (public).

Then add two public methods, with the same name, to the two classes:

- In the `Piece` class, add the method `string Piece::getType()` that returns `"Unknown Piece Type"`.
- In the `Queen` class, add the method `string Queen::getType()` that returns `"Queen"`.

Testing Your Code

We provide you with a `main.cpp`. In main, we create a `Queen` and call the same function on it in different context. Run the following commands to compile and execute your code:

```
make
./main
```

Sample Output

```
In main, printType() of Queen *q is: Queen
In printPiece, printType() of the same memory address is: Unknown Piece Type
```

Upload Solution

Drop files here or click to upload.

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

POTD 8

Total points: 0/1

Score: 0%

Question

Value: 1

History:

Awarded points: 0/1

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Files

☐ Piece.cpp
not uploaded

☐ Piece.h
not uploaded

Save & Grade

Save only

☐ Queen.h
not uploaded