

POTD8.1. Problem of the Day #8

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.

Files

✓

Piece.cpp

uploaded

Show preview ▾

✓

Piece.h

uploaded

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✓

Queen.cpp

uploaded

Show preview ▾

✓

Queen.h

uploaded

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POTD 8

Total points:

1/1

Score:

100%

Question

Value:

1

History:

1

Awarded points:

1/1

Report an error in this question

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Submitted answer

correct: 100%

Submitted at 2019-02-01 07:53:51 (CST)

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Files

✓ Piece.cpp

uploaded

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✓ Piece.h

uploaded

Show preview ▾

✓ Queen.cpp

uploaded

Show preview ▾

✓ Queen.h

uploaded

Show preview ▾

Score: 3/3 (100%)

Test Results

✓ [1/1] Queen returns Queen.

▾

✓ [1/1] Piece returns Unknown Piece Type.

▾

✓ [1/1] Queen assigned to Piece returns Unknown Piece Type.

▾