

POTD4.1. Problem of the Day #4

Download and Extract

An initial setup of files is provided to you via a shell script: [Download potd-q4](#)

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-q4.sh
```

Your files for this problem will be in the potd-q4 directory.

The Problem

Explore the different ways of passing variables to functions by writing three functions that print out the passed variable memory address. Complete three functions in q4.cpp:

1. `pass_by_value`, passing a `Circle` class by value
2. `pass_by_pointer`, passing a `Circle` class by pointer
3. `pass_by_ref`, passing a `Circle` class by reference

You will also need to write their prototypes in q4.h.

Each of these functions are already called in `main`. You should look at how they are used to set up your function correctly. In every function, the `Circle` should be passed as the variable `c`.

A Makefile has been provided for you, which will make `main`. Once your program prints out all four memory addresses, ensure the memory addresses printed out are what you expect (eg: which ones are the same?).

Upload Solution

Drop files here or click to upload.
Only the files listed below will be accepted—others will be ignored.

Files

✓ q4.cpp
uploaded

Show preview ▾

✓ q4.h
uploaded

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Save & Grade

Save only

Submitted answer

correct: 100%

i

hide ^

Submitted at 2019-01-25 13:23:29 (CST)

Files

✓ q4.cpp
uploaded

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✓ q4.h
uploaded

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POTD 4

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

Score: 3/3 (100%)

Test Results

| | | |
|---------|--|---|
| ✓ [1/1] | Test that pass_by_value can be called. | ▼ |
| ✓ [1/1] | Test that pass_by_pointer can be called. | ▼ |
| ✓ [1/1] | Test that pass_by_ref can be called. | ▼ |