

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`
not uploaded

☐ `q4.h`
not uploaded

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Save only

POTD 4

Total points: 0/1

Score: 0%

Question

Value: 1

History:

Awarded points: 0/1

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