

Credit Name: CSE 2140 2nd Language Programming

Assignment Name: Volumes

The following questions can help you in thinking critically about your problem-solving processes:

Understanding the Problem

How did you approach understanding the challenge?

Were there any parts of the problem you found confusing at first? If so, how did you resolve that confusion?

I did not find the challenge very hard to understand, and I just approached by thinking of it as a combination of simple mathematical equations. I was confused at the floating-point behaviors, but I resolved that confusion by asking AI for assistance.

Planning the Solution

Did you create a plan or break the problem into smaller steps before coding?

How did you decide on the tools, data structures, or algorithms to use?

I broke the problem down into 3 parts, those being the rectangular prism, the sphere, and the cube. I decided on what tools to use by their relevance to the problem, such as using the Math class in order to retrieve the value of PI.

Implementation

Did you write the code in small pieces or attempt the entire solution at once?

How did you test your solution along the way to make sure it was working?

The code kind of had to be written in small pieces. I wrote it in 7 sections, and a few of the sections are very similar to others. I tested my solution after I finished the section for each shape.

Overcoming Challenges

What part of the problem was the most difficult for you?

How did you handle moments when you felt stuck or unsure of what to do next?

The most difficult problem was modifying the floating-point behaviors. I handled moments of difficulty by seeking the assistance of AI.

Learning

Was there anything you learned that you think will help you with future challenges?

I learned about some floating-point behaviours that computers display and how to change them in Java. This will be useful in the future for when I want to display certain double values.