

Lab 1

Write a program that reads in the radius and length of a cylinder and computes the area and volume using the following formula:

$$\begin{aligned}\text{area} &= \text{radius} * \text{radius} * \pi \\ \text{volume} &= \text{area} * \text{length}\end{aligned}$$

Here is a sample run:

Enter the radius of a cylinder: 5.5
Enter the length of a cylinder: 12

The volume is 1140.4

Notes:

- Your program displays “Enter the radius of a cylinder:” the user enters a real number, 5.5 for example.
Then your program displays “Enter the length of a cylinder:” the user enters an integer number, 12 for example.
- For the value of π , please use `Math.PI` which is a constant defined in the `Math` class.

Marking Scheme

- [10 marks] Program works without any bugs.