

**CSCI-105 Introduction to Programming**  
Lab 5 - Thursday

### Instructions

Log onto cs.bridgewater.edu. Change your working directory to the labs directory in your repository. Create a subdirector (in labs) named lab5. Change your working directory to lab5. When complete, please push your code to GitHub.

Write a Java program in a class named **HexArea** that behaves as follows:

The program repeatedly does the following:

- Print the following menu
  - **[1] determine the area of a hexagon**
  - **[2] exit**
- If the user enters 2 to exit, the program should terminate.
- If the user enters 1 to determine the area of a hexagon. The program should prompt the user to enter in the length of a side of the hexagon.

The area of a hexagon is computed using the following formula.

$$Area = \frac{6 * s^2}{4 * \tan(\frac{\pi}{6})}$$

where s is the length of a side of the hexagon.

### Example Output

**Please enter the length of a side: 5.5 [enter]**  
**The area of the hexagon is 78.59**