Name: 周嘉禾

Student ID: D1166506

In this program, I used 4 classed: Draw, Square, Triangle, and Rhombus, respectively. Square, Triangle, and Rhombus are derived from Draw class, and they share virtual functions, like info(), drawboard(), and printBoard(), and were implemented in each class afterward. Another thing has to be mentioned is that I create a different constructor which allow the derived classes use to initialize things and can secure the level of instance is at the right place. Therefore, I don’t have to implement the default and assignment constructors in each class, but only call the constructor in Draw class, instead. The same case would happen in deconstructor as well since all instances are allocated at Draw class and can be used automatically when leave the program.

In each derived class, I implemented all the virtual functions, and only drawBoard() is different between each class, but the others share the same code.