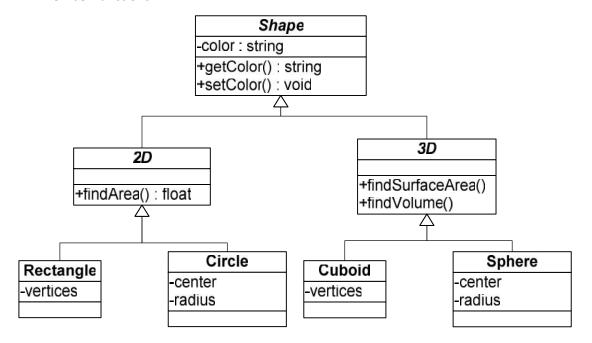
Institute of Engineering and Technology Ahmedabad University

Semester - II

Section - A & B Lab Assignment - Session 9

Assignment Date: Thursday, April 09, 2015 Submission Date: Tuesday, April 14, 2015

- Q1. Modify the banking program of Lab Assignment Session 7 & 8 to ensure that exceptions related to file reading and writing operations are appropriately handled. In case of an exception is generated after successfully opening a file, the file should be closed through the exception handling mechanism. The "deposit" and "withdraw" functions should throw an user-defined exception in case of an invalid operation. For example, the "deposit" function should throw an appropriate exception if a negative amount is deposited.
- **Q2.** Design the following classes in Java by selecting appropriate data members, constructors and member functions:



Other data members and/or member functions should also be included apart from those mentioned in the above diagram. Restrict the creation of objects for "Shape", "2D", and "3D" classes. Create appropriate member functions for checking the validity of values stored in various classes and generate exceptions in case of invalid values. Create a menu driven program in order to allow the user to create different shapes and perform various operations. Also, allow the user to store and retrieve shapes from different binary files. Use exception handling mechanism to ensure valid operations on files.
