



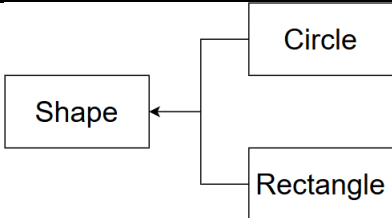
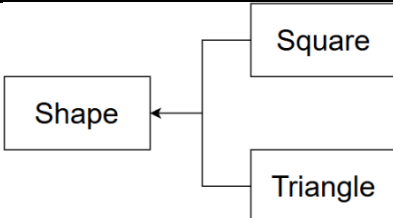
**AMERICAN INTERNATIONAL UNIVERSITY-BANGLADESH
(AIUB)**

Faculty of Science and Technology (FST)
Department of Computer Science (CS)

Course title: CSC 1205: Object Oriented Programming 1 (JAVA)

Topic: Developing a basic java class with Inheritance.

Look at the following class notation and class diagram carefully. Then develop the program.

Lab Task 1	Lab Task 2
 <p align="center">Class Diagram</p>	 <p align="center">Class Diagram</p>
<p align="center">Shape</p> <pre>double x Shape() Shape(double x) void setX(double x) double getX() double getArea() //returns -9.99 as shape has no area to calculate</pre>	<p align="center">Shape</p> <pre>double x Shape() Shape(double x) void setX(double x) double getX() double getArea() //returns -9.99 as shape has no area to calculate</pre>
<p align="center">Circle</p> <pre>Circle() Circle(double x) double getArea() //calculate and returns the area of the circle (πx²) void showInfo()</pre>	<p align="center">Square</p> <pre>Square() Square(double x) double getArea() //calculate and returns the area of the square (x²) void showInfo()</pre>
<p align="center">Rectangle</p> <pre>double y Rectangle() Rectangle(double x, double y) void setY(double y) double getY() double getArea() //calculate and returns the area of the rectangle (xy) void showInfo()</pre>	<p align="center">Triangle</p> <pre>double y Triangle() Triangle(double x, double y) void setY(double y) double getY() double getArea() //calculate and returns the area of the rectangle (0.5xy) void showInfo()</pre>
<p align="center">Start</p> <p>The Start class contains the main method. Inside the main method, create two objects of Circle class and two objects of Rectangle class. Then demonstrate all the methods and constructors.</p>	<p align="center">Start</p> <p>The Start class contains the main method. Inside the main method, create two objects of Square class and two objects of Triangle class. Then demonstrate all the methods and constructors.</p>