5. **Develop a JAVA program to create a class named shape. Create three sub classes namely: circle, triangle and square, each class has two member functions named draw () and erase (). Demonstrate polymorphism concepts by developing suitable methods, defining member data and main program.**

Shape.java

```
public class Shape
{
    // Member functions
    public void draw()
    {
        System.out.println("Drawing a shape");
    }

    public void erase()
    {
        System.out.println("Erasing a shape");
    }
}

// Circle class, a subclass of Shape
class Circle extends Shape
{
    public void draw()
    {
        System.out.println("Drawing a circle");
    }
    public void erase()
    {
        System.out.println("Erasing a circle");
    }
}

// Triangle class, a subclass of Shape
class Triangle extends Shape
{
    public void draw()
    {
        System.out.println("Drawing a triangle");
    }

    public void erase()
    {
        System.out.println("Erasing a triangle");
    }
}

// Square class, a subclass of Shape
class Square extends Shape
{
```

```
    public void draw()
    {
        System.out.println("Drawing a square");
    }

    public void erase()
    {
        System.out.println("Erasing a square");
    }
}

// Main program to demonstrate polymorphism
class Main
{
    public static void main(String[] args)
    {
        // Creating objects of different shapes
        Circle c = new Circle();
        Triangle t = new Triangle();
        Square s = new Square();

        // Demonstrating polymorphism by calling draw and erase methods
        System.out.println("Using Circle object:");
        c.draw();
        c.erase();

        System.out.println("\nUsing Triangle object:");
        t.draw();
        t.erase();

        System.out.println("\nUsing Square object:");
        s.draw();
        s.erase();
    }
}
```