**package** AreaforDifferentGeometric\_pack;

**import** java. util.Scanner;

**public** **class** GeometryAreaCalculator {

**public** **static** **void** main(String[] args) {

Scanner input = **new** Scanner(System.***in***);

**int** choice;

**double** area;

**do** {

System. ***out***.println("Geometry Area Calculator");

System.***out***.println("1. Rectangle");

System.***out***.println("2. Triangle");

System.***out***.println("3. Circle");

System.***out***.println("4. Quit");

System. ***out***.print("Enter your choice (1-4): ");

choice = input.nextInt();

**if** (choice == 1) {

System.***out***.print("Enter the length: ");

**double** length = input.nextDouble();

System.***out***.print("Enter the width: ");

**double** width = input.nextDouble();

area = length \* width;

System.***out***.println("The area of the rectangle is " + area);

} **else** **if** (choice == 2) {

System.***out***.print("Enter the base: ");

**double** base = input.nextDouble();

System.***out***.print("Enter the height: ");

**double** height = input.nextDouble();

area = 0.5 \* base \* height;

System.***out***.println("The area of the triangle is " + area);

} **else** **if** (choice == 3) {

System.***out***.print("Enter the radius: ");

**double** radius = input.nextDouble();

area = Math.***PI*** \* radius \* radius;

System.***out***.println("The area of the circle is " + area);

} **else** **if** (choice != 4) {

System. ***out***.println("Invalid choice. Please try again.");

}

System.***out***.println();

} **while** (choice != 4);

}

}