**Date: Feb 26, 2021**

**Lab 4**

**Scribe (Nachiketh Mamidi)**

**Driver (Ayush Shresth)**

Part A

Scribe

|  |  |  |
| --- | --- | --- |
| Name | totalScore | quizCount |
| nik | 0 | 0 |
|  | 1 | 1 |
|  | 3 | 2 |
|  | 6 | 3 |

Driver

|  |  |  |
| --- | --- | --- |
| score | newTotalScore | newQuizCount |
| 1 | 1 | 1 |
| 2 | 3 | 2 |
| 3 | 6 | 3 |

1. -n-
2. -n-
3. -n-
4. Average score = 2
5. totalScore is not a local variable as it is declared outside the method and can be accessed in multiple methods whereas newTotalScore is declared inside a method and cant be accessed outside that.

Part B:

1. -n-
2. We get 2 rectangle over lapping in bottom right corner.
3. -n-
4. Change the width and height parameters of the ellipse and to an equal number.

public class RectangleViewer

{

public static void main(String[] args)

{

Ellipse box = new Ellipse(5, 10, 20, 20);

box.draw();

Ellipse box2 = new Ellipse(20, 35, 60, 60);

box2.draw();

}

}

1. A. (50,65)

B. (35,50)

public class RectangleViewer

{

public static void main(String[] args)

{

Ellipse box = new Ellipse(35, 50, 30, 30);

box.draw();

Ellipse box2 = new Ellipse(20, 35, 60, 60);

box2.draw();

}

}

Part C:

public class bullsEyeViewer

{

public static void main(String[] args)

{

Ellipse box = new Ellipse(35, 50, 30, 30);

box.draw();

Ellipse box2 = new Ellipse(20, 35, 60, 60);

box2.draw();

}

}

1. -n-

public class bullsEyeViewer

{

public static void main(String[] args)

{

Ellipse box = new Ellipse(35, 50, 30, 30);

box.setColor(Color.RED);

box.fill();

Ellipse box2 = new Ellipse(20, 35, 60, 60);

box2.setColor(Color.RED);

box2.draw();

}

}

4.

public class bullsEyeViewer

{

public static void main(String[] args)

{

Ellipse box2 = new Ellipse(20, 35, 60, 60);

box2.setColor(Color.BLACK);

box2.fill();

Ellipse box = new Ellipse(35, 50, 30, 30);

box.setColor(Color.RED);

box.fill();

}

}

5.

public class bullsEyeViewer

{

public static void main(String[] args)

{

Ellipse box3 = new Ellipse(5, 20, 90, 90);

box3.setColor(Color.BLUE);

box3.fill();

Ellipse box2 = new Ellipse(20, 35, 60, 60);

box2.setColor(Color.WHITE);

box2.fill();

Ellipse box = new Ellipse(35, 50, 30, 30);

box.setColor(Color.RED);

box.fill();

}

}

Part D:

1. -n-

public void draw()

{

int d = 90;

Ellipse biggestCircle = new Ellipse(x - d / 2, y - d / 2, d, d);

biggestCircle.setColor(Color.BLUE);

biggestCircle.fill();

}

1. It displays 3 blue circles because Bullseye method draws blue circle.

public void draw()

{

int d = 90;

Ellipse biggestCircle = new Ellipse(x - d / 2, y - d / 2, d, d);

biggestCircle.setColor(Color.BLUE);

biggestCircle.fill();

d = 60;

Ellipse middleCircle = new Ellipse(x - d / 2, y - d / 2, d, d);

middleCircle.setColor(Color.WHITE);

middleCircle.fill();

}

5.

public void draw()

{

int d = 90;

Ellipse biggestCircle = new Ellipse(x - d / 2, y - d / 2, d, d);

biggestCircle.setColor(Color.BLUE);

biggestCircle.fill();

d = 60;

Ellipse middleCircle = new Ellipse(x - d / 2, y - d / 2, d, d);

middleCircle.setColor(Color.WHITE);

middleCircle.fill();

d = 30;

Ellipse smallCircle = new Ellipse(x - d / 2, y - d / 2, d, d);

smallCircle.setColor(Color.RED);

smallCircle.fill();

}