Question 1:

*(Tic-tac-toe board)* Write a program that displays a tic-tac-toe board, as shown in Figure 14.43b. A cell may be X, O, or empty. What to display at each cell is randomly decided. The X and O are images in the files *x.gif* and *o.gif*.

![Figure 14.43b](image)

Question 2:

*(Characters around circle)* Write a program that displays a string Welcome to Java around the circle, as shown in Figure 14.44b. Hint: You need to display each character in the right location with appropriate rotation using a loop.

![Figure 14.44b](image)

Question 3:

*(Display a STOP sign)* Write a program that displays a STOP sign, as shown in Figure 14.47b. The octagon is in red and the sign is in white. *(Hint: Place an octagon and a text in a stack pane.)*

![Figure 14.47b](image)
Question-4:

*(Use the ClockPane class)* Write a program that displays two clocks. The hour, minute, and second values are **4, 20, 45** for the first clock and **22, 46, 15** for the second clock, as shown in Figure 14.51c.

Question-5 (extra credit):

*(Hilbert curve)* The Hilbert curve, first described by German mathematician David Hilbert in 1891, is a space-filling curve that visits every point in a square grid with a size of **2 × 2, 4 × 4, 8 × 8, 16 × 16**, or any other power of 2. Write a program that displays a Hilbert curve for the specified order, as shown in Figure 18.19.

Hilbert curves of orders 1, 2, 3, and 4.