Michael Richards

Part A:

//Student: Michael Richards  
//Course: CS 140C  
//Date: 1/28/19  
//Project: Lab #3 Part A  
//  
//This progrom will produce a picture that I made.  
  
import java.awt.\*;  
  
public class Doodle {  
 public static void main(String[] args) {  
 DrawingPanel panel = new DrawingPanel(350, 200);  
 Graphics g = panel.getGraphics();  
 panel.setBackground(Color.*BLUE*);  
   
 g.setColor(Color.*WHITE*);  
 g.fillOval(15, 15, 20, 20);  
 g.drawOval(50, 50, 10, 30);  
 g.fillRect(100, 100, 50, 20);  
   
 g.setColor(Color.*GREEN*);  
 g.setFont(new Font("SansSerif", Font.*PLAIN*, 15));  
 g.drawString("X", 20, 30);  
   
 g.setColor(Color.*PINK*);  
 g.drawLine(300, 50, 200, 30);  
 g.drawLine(200, 30, 300, 10);  
 g.drawLine(300, 50, 300, 10);  
   
 g.setColor(Color.*YELLOW*);  
 g.drawRect(0, 0, 50, 50);  
 g.drawLine(0, 25, 25, 0);  
 g.drawLine(25, 0, 50, 25);  
 g.drawLine(50, 25, 25, 50);  
 g.drawLine(25, 50, 0, 25);  
 }  
}

Part B:

//Student: Michael Richards  
//Course: CS 140C  
//Date: 1/28/19  
//Project: Lab #3 Part B  
//  
//This progrom will produce the picture provided to us.  
  
import java.awt.\*;  
  
public class CafeWall2 {  
 public static void main(String[] args) {  
 DrawingPanel panel = new DrawingPanel(650, 400);  
 panel.setBackground(Color.*GRAY*);  
   
 Graphics g = panel.getGraphics();  
   
 *drawUpperLeft*(g);  
 *drawMidLeft*(g);  
 *drawLowerLeft*(g);  
 *drawLowerMiddle*(g);  
 *drawLowerRight*(g);  
 *drawUpperRight*(g);  
 }  
   
 // Draws Upper Left  
 public static void drawUpperLeft(Graphics g) {  
 for (int i = 0; i < 4; i++) {  
 int x1 = i \* 40;  
 g.setColor(Color.*BLACK*);  
 g.fillRect(x1, 0, 20, 20);  
 g.setColor(Color.*BLUE*);  
 int x2 = i \* 40 + 20;  
 g.drawLine(x1, 0, x2, 20);  
 g.drawLine(x2, 0, x1, 20);  
 g.setColor(Color.*WHITE*);  
 g.fillRect(x2, 0, 20, 20);  
 }  
 }  
   
 // Draws Mid Left  
 public static void drawMidLeft(Graphics g) {  
 for (int i = 0; i < 5; i++) {  
 int x1 = i \* 60 + 50;  
 g.setColor(Color.*BLACK*);  
 g.fillRect(x1, 70, 30, 30);  
 int x2 = i \* 60 + 80;  
 g.setColor(Color.*BLUE*);  
 g.drawLine(x1, 70, x2, 100);  
 g.drawLine(x2, 70, x1, 100);  
 g.setColor(Color.*WHITE*);  
 g.fillRect(x2, 70, 30, 30);  
 }  
 }  
   
 // Draw Lower Left  
 public static void drawLowerLeft(Graphics g) {  
 for(int i = 0; i < 8; i++) {  
 for (int j = 0; j < 4; j++) {  
 int x1 = j \* 50 + 10;  
 int spacer = i \* 2;  
 int y = 123 + i \* 25 + spacer;  
 g.setColor(Color.*BLACK*);  
 g.fillRect(x1, y, 25, 25);  
 int x2 = j \* 50 + 35;  
 g.setColor(Color.*BLUE*);  
 g.drawLine(x1, y, x2, y + 25);  
 g.drawLine(x2, y, x1, y + 25);  
 g.setColor(Color.*WHITE*);  
 g.fillRect(x2, y, 25, 25);  
 }  
 }   
 }  
   
 // Draw Lower Middle  
 public static void drawLowerMiddle(Graphics g) {  
 for(int i = 0; i < 6; i++) {  
 int offset = (i % 2) \* 10;  
 for(int j = 0; j < 3; j++) {  
 int spacer = i \* 2;  
 int y = 200 + i \* 25 + spacer;  
 int x1 = j \* 50 + 250 + offset;  
 g.setColor(Color.*BLACK*);  
 g.fillRect(x1, y, 25, 25);  
 int x2 = j \* 50 + 275 + offset;  
 g.setColor(Color.*BLUE*);  
 g.drawLine(x1, y, x2, y + 25);  
 g.drawLine(x2, y, x1, y + 25);  
 g.setColor(Color.*WHITE*);  
 g.fillRect(x2, y, 25, 25);  
 }  
 }  
 }  
   
 // Draw Lower Right  
 public static void drawLowerRight(Graphics g) {  
 for(int i = 0; i < 10; i++) {  
 int offset = (i % 2) \* 10;  
 for(int j = 0; j < 4; j++) {  
 int spacer = i \* 2;  
 int y = 180 + i \* 20 + spacer;  
 int x1 = j \* 40 + 425 + offset;  
 g.setColor(Color.*BLACK*);  
 g.fillRect(x1, y, 20, 20);  
 int x2 = j \* 40 + 445 + offset;  
 g.setColor(Color.*BLUE*);  
 g.drawLine(x1, y, x2, y + 20);  
 g.drawLine(x2, y, x1, y + 20);  
 g.setColor(Color.*WHITE*);  
 g.fillRect(x2, y, 20, 20);  
 }  
 }  
 }  
   
 // Draw Upper Right  
 public static void drawUpperRight(Graphics g) {  
 for(int i = 0; i < 4; i++) {  
 int offset = (i % 2) \* 35;  
 for(int j = 0; j < 2; j++) {  
 int spacer = i \* 2;  
 int y = 20 + i \* 35 + spacer;  
 int x1 = j \* 70 + 400 + offset;  
 g.setColor(Color.*BLACK*);  
 g.fillRect(x1, y, 35, 35);  
 int x2 = j \* 70 + 435 + offset;  
 g.setColor(Color.*BLUE*);  
 g.drawLine(x1, y, x2, y + 35);  
 g.drawLine(x2, y, x1, y + 35);  
 g.setColor(Color.*WHITE*);  
 g.fillRect(x2, y, 35, 35);  
 }  
 }  
 }  
}