```java
import java.awt.*;
import java.io.*;
import javafx.application.Application;
import javafx.collections.FXCollections;
import javafx.collections.ObservableList;
import javafx.scene.Scene;
import javafx.stage.Stage;
import javafx.scene.chart.*;
import javafx.scene.Group;
import java.io.*;
import java.util.*;
import javax.swing.*;

import javax.swing.JFrame;

import javafx.application.Application;

public class HistogramLetters extends Canvas {

    public static void main(String[] args)throws Exception
      {
        JFrame frame = new JFrame("Pie Chart");
        //Canvas canvas = new HistogramLetters();
        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        frame.setSize(800,800);
        //frame.add(canvas);
        //frame.pack();
        //frame.setBackground(Color.darkGray);
        frame.setVisible(true);

        Scanner reader = new Scanner(System.in);
        System.out.println("Enter amount of events to view:");
        int n = reader.nextInt();
        if(n > 26)
            n = 26;
        if(n < 0)
            n = 0;

      File file = new File("C:\\Users\\Nicholas G. Comer\\eclipse-workspace\\SDL3\\src\
  \Emma.txt");

      BufferedReader br = new BufferedReader(new FileReader(file));

      int total = 0;
      int c;
      HashMap<String, Integer> Letters = new HashMap<String, Integer>();
      while ((c = br.read()) != -1) {
        int copy = c;
        int val = 0;
        if(copy >= 97 && copy <= 122)
            copy -= 32;

        if(copy >= 65 && copy <= 90)
        {
            if(Letters.containsKey(""+(char)copy))
            {
                val = Letters.get(""+(char)copy);
```

```
57                  val++;
58                  Letters.replace(""+(char)copy, val);
59              }
60              else
61                  Letters.put(""+(char)copy, 1);
62
63              total++;
64          }
65
66
67      }
68
69      PieChart p1 = new PieChart(Letters, total, 800,800, n);
70
71      JPanel panel = new JPanel() {
72            public void paintComponent(Graphics g) {
73                super.paintComponent(g);
74                p1.draw(g);
75                //g.setColor(Color.BLUE);
76                //g.fillRect(0, 0, 100, 100);
77            }
78        };
79        frame.add(panel);
80
81        frame.validate();
82        //frame.repaint();
83
84      /*System.out.println(total);
85      for (String name: Letters.keySet()){
86
87          String key =name.toString();
88          String value = Letters.get(name).toString();
89          System.out.println(key + " " + value);
90        }*/
91      }
92
93  }
94
```