```java
package week1;
import java.util.Scanner;
import javax.swing.*;
import java.util.*;
import java.awt.*;
import java.awt.event.MouseAdapter;
import java.awt.event.MouseEvent;
class Details
{   static String name;
  static  int age;
   static String g;
  static  int wt;
   static String bgo;
            public static void details()
  {
     Scanner sc=new Scanner(System.in);
     System.out.println("Enter The Patient's Name:");
     name=sc.next();
     System.out.println("Enter The Patient's Age:");
     age=sc.nextInt();
     System.out.println("Enter The Patient's Gender:");
      g=sc.next();
     System.out.println("Enter The Patient's Weight:");
     wt=sc.nextInt();
     System.out.println("Enter The Patient's Blood Group:");
     bgo=sc.next();
  }
            }
class MedicalCardDisplay {

  public static void displayMedicalCard(String diagnosis) {
      SwingUtilities.invokeLater(() -> {

          JFrame frame = new JFrame("Medical Card");
          frame.setSize(800, 600); // Set the size of the frame
          frame.getContentPane().setBackground(Color.WHITE); // Set background color
          frame.setLayout(new BorderLayout()); // Set layout manager
          String nm=Details.name;
          int ag=Details.age;
          String gen=Details.g;
          String bgr=Details.bgo;
          int wg=Details.wt;
          JLabel introLabel=new JLabel("Hi "+nm+"!");
          JLabel reportLabel =new JLabel("Here's your preliminary medical diagnosis report");


          JLabel diagnosisLabel = new JLabel("Based on your responses, your probable diagnosis is:");
          JLabel diagnosisValueLabel = new JLabel("<html><div style='border: 1px solid black; padding:
5px;'>" + diagnosis + "</div></html>");
          JLabel recommendationLabel = new JLabel("We recommend consulting with a professional to
confirm this preliminary assessment and seek appropriate guidance.");
          JLabel infoLabel = new JLabel("You can also refer to the following resources for additional
information.");
          JLabel thankYouLabel = new JLabel("Thank you for using our diagnosis system. Stay healthy,
stay fit.");
          Font font = new Font("Arial", Font.BOLD, 18); // Set font
          Color textColor = Color.BLACK; // Set text color
          introLabel.setFont(font);
          reportLabel.setFont(font);
```

```
        introLabel.setHorizontalAlignment(JLabel.CENTER);
        reportLabel.setHorizontalAlignment(JLabel.CENTER);

        diagnosisLabel.setHorizontalAlignment(JLabel.CENTER);
        diagnosisValueLabel.setHorizontalAlignment(JLabel.CENTER);
        recommendationLabel.setHorizontalAlignment(JLabel.CENTER);
        thankYouLabel.setHorizontalAlignment(JLabel.CENTER);

        JPanel infoPanel = new JPanel();
        infoPanel.setBackground(new Color(173, 216, 230));
        infoPanel.setLayout(new GridLayout(4, 1,0,10));
        infoPanel.setBorder(BorderFactory.createEmptyBorder(10, 20, 10, 20)); // Add padding

        JLabel nameLabel = new JLabel("<html><div style='border: 1px solid black; padding:
5px;'>"+"Name: " + Details.name+"</div></html>");
        JLabel ageLabel = new JLabel("<html><div style='border: 1px solid black; padding:
5px;'>"+"Age: " + Details.age+"</div></html>");
        JLabel genderLabel = new JLabel("<html><div style='border: 1px solid black; padding:
5px;'>"+"Gender: " + Details.g+"</div></html>");
        JLabel weightLabel = new JLabel("<html><div style='border: 1px solid black; padding:
5px;'>"+"Weight: " + Details.wt+"</div></html>");
        JLabel bloodLabel= new JLabel("<html><div style='border: 1px solid black; padding:
5px;'>"+"Blood Group: "+ Details.bgo+"</div></html>");
        Font labelFont = new Font("Arial", Font.BOLD, 20);
        nameLabel.setFont(labelFont);
        ageLabel.setFont(labelFont);
        genderLabel.setFont(labelFont);
        weightLabel.setFont(labelFont);
        bloodLabel.setFont(labelFont);
        nameLabel.setHorizontalAlignment(SwingConstants.CENTER);
        ageLabel.setHorizontalAlignment(SwingConstants.CENTER);
        genderLabel.setHorizontalAlignment(SwingConstants.CENTER);
        weightLabel.setHorizontalAlignment(SwingConstants.CENTER);
        bloodLabel.setHorizontalAlignment(SwingConstants.CENTER);
         infoPanel.add(Box.createVerticalStrut(10));
        infoPanel.add(nameLabel);
        infoPanel.add(Box.createVerticalStrut(5));
        infoPanel.add(ageLabel);
        infoPanel.add(Box.createVerticalStrut(5));
        infoPanel.add(genderLabel);
        infoPanel.add(Box.createVerticalStrut(5));
        infoPanel.add(weightLabel);
        infoPanel.add(Box.createVerticalStrut(5));
        infoPanel.add(bloodLabel);
        infoPanel.add(Box.createVerticalStrut(5));
        JPanel mainPanel = new JPanel(new BorderLayout());
        mainPanel.setBackground(Color.WHITE);
        mainPanel.add(infoPanel, BorderLayout.CENTER);
        mainPanel.add(diagnosisLabel, BorderLayout.NORTH);
        mainPanel.add(diagnosisValueLabel, BorderLayout.SOUTH);
        frame.add(mainPanel);

        infoPanel.setLayout(new BoxLayout(infoPanel, BoxLayout.X_AXIS)); // Set X_AXIS orientation
        infoPanel.add(Box.createRigidArea(new Dimension(10, 0))); // Add spacing between labels
        infoPanel.add(Box.createRigidArea(new Dimension(10, 0))); // Add spacing between labels
        infoPanel.add(Box.createRigidArea(new Dimension(10, 0))); // Add spacing between labels
        infoLabel.setHorizontalAlignment(JLabel.CENTER);
        diagnosisLabel.setFont(font);
        diagnosisValueLabel.setFont(font);
        recommendationLabel.setFont(font);
```

```
        infoLabel.setFont(font);
        thankYouLabel.setFont(font);
        diagnosisLabel.setForeground(textColor);
        diagnosisValueLabel.setForeground(textColor);
        recommendationLabel.setForeground(textColor);
        infoLabel.setForeground(textColor);
        thankYouLabel.setForeground(textColor);
        JLabel label = new JLabel("Click here to refer to resources");
        Color darkBlue = new Color(0, 0, 128);
        label.setForeground(darkBlue);
        label.setCursor(Cursor.getPredefinedCursor(Cursor.HAND_CURSOR));
        label.addMouseListener(new MouseAdapter() {
            @Override
            public void mouseClicked(MouseEvent e) {
                try {
                    Desktop.getDesktop().browse(new
java.net.URI("https://drive.google.com/file/d/17KgWsIiYy7ud7J_C_E4lPMVGgW9oGQM7/view?usp=s
haring"));
                } catch (Exception ex) {
                    ex.printStackTrace();
                }
            }
        });
        label.setFont(new Font("Arial", Font.BOLD, 20)); // Set font to Arial, bold, size 20
        label.setHorizontalAlignment(JLabel.CENTER);
        JPanel panel = new JPanel();
        panel.setBackground(Color.LIGHT_GRAY);
        panel.setLayout(new GridLayout(0, 1));
        panel.add(introLabel);
        panel.add(reportLabel);
        panel.add(infoPanel); // Add the panel containing name, age, gender labels
        panel.add(diagnosisLabel);
        panel.add(diagnosisValueLabel);
        panel.add(recommendationLabel);
        panel.add(infoLabel);
        panel.add(label);
        panel.add(thankYouLabel);

        JPanel headerPanel = new JPanel(new BorderLayout());
        headerPanel.setBackground(new Color(0, 0, 128)); // Dark blue color
        headerPanel.setPreferredSize(new Dimension(frame.getWidth(), 50)); // Set height
        JLabel headerLabel = new JLabel("Welcome to SymptoScan");
        headerLabel.setForeground(Color.WHITE); // White text color
        headerLabel.setFont(new Font("Arial", Font.BOLD, 20)); // Set font
        headerLabel.setHorizontalAlignment(SwingConstants.CENTER);
        headerPanel.add(headerLabel, BorderLayout.CENTER);

        JScrollPane scrollPane = new JScrollPane(panel);
        frame.add(scrollPane, BorderLayout.CENTER); // Add scroll pane to center of frame
        frame.add(headerPanel, BorderLayout.NORTH);
        frame.setLocationRelativeTo(null); // Center the frame on the screen
        frame.setVisible(true);
    });
  }
}
class TreeNode {
          String diagno;
  String name;
  TreeNode yesNode;
  TreeNode noNode;
```

```
  public TreeNode(String name) {
     this.name = name;
     this.yesNode = null;
     this.noNode = null;
  }
  public void setYesNode(TreeNode node) {
     this.yesNode = node;
     }
  public void setNoNode(TreeNode node) {
     this.noNode = node;
  }
  public String getName() {
     return name;
  }
  public TreeNode getYesNode() {

     return yesNode;
  }                              root=new TreeNode("Does the patient have
  public TreeNode getNoNode() {
     return noNode;
  }
}
public class Disease_Diagnosis {
            private static TreeNode root;
              public static void main(String[] args) {
                 buildTree();
                 diagnose();
              }
             private static void buildTree() {
fever?");
                              TreeNode highfeverNode = new TreeNode("Does the patient have high grade
fever?");
                              TreeNode nofeverNode=new TreeNode("Does the patient feel low or lethargic?");
                              TreeNode recent_travelNode = new TreeNode("Did he/she travel recently?");
                              TreeNode lowgradefeverNode = new TreeNode("Does the patient have a low
grade fever?");
                              TreeNode food_yesNode = new TreeNode("Consumption of food from outside");
                              TreeNode weaknessNode = new TreeNode("Is the patient having symptoms like
weakness,fatigue?");
                              TreeNode coughNode = new TreeNode("Is the patient having symptoms like
cough,chest pain or shortness of breath?");
                              TreeNode diarrhoeaNode = new TreeNode("Does the patient have diarrhoea or
constipation?");
                              TreeNode vomitting_100Node = new TreeNode("Is the patient experiencing
vomitting?");
                              TreeNode vomitting_40Node = new TreeNode("Is the patient experiencing
vomitting?");
                              TreeNode lowfever_recentTravelNode = new TreeNode("Did he/she travel
recently?");
                              TreeNode TyphoidNode = new TreeNode("Typhoid");
                              TreeNode Typhoid_40Node = new TreeNode("The patient has
typhoid(probability=30-40%)");
                              TreeNode NoTyphoidNode = new TreeNode("The patient doesn't have typhoid
and might have some other disease or common fever");
                              TreeNode cough_fatigue_lossofappetiteNode = new TreeNode("Is the patient
experiencing fatigue,loss of appetite or nausea and vomitting");
                              TreeNode chronic_diseaseNode = new TreeNode("Does the patient have any
medical history of chronic illnesses like asthama,diabetes etc.");
                              TreeNode common_feverNode = new TreeNode("The patient has common
fever");
```

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                    TreeNode smoking_100Node = new TreeNode("Does the patient smoke? or is exposed to pollutants due to job or any other reason?");
                    TreeNode smoking_Node = new TreeNode("Does the patient smoke? or is exposed to pollutants due to job or any other reason?");
                    TreeNode PneumoniaNode = new TreeNode("The patient has pneumonia");
                    TreeNode PneumoniaNode_80 = new TreeNode("The patient has pneumonia (probability=80%)");
                    TreeNode PneumoniaNode_low = new TreeNode("The patient has pneumonia (low probability)");

                    TreeNode lowfever_foodNode=new TreeNode("Has the patient consumed food from outside?");
                    TreeNode lowfever_weaknessNode=new TreeNode("Does the patient feel weakness or experience loss in appetite?");
                    TreeNode lowfever_stomachpainNode=new TreeNode("Does the patient feel stomach pain or has experienced vomiting?");
                    TreeNode lowfever_runnynoseNode=new TreeNode("Does the patient have a runny nose or a sore throat?");
                    TreeNode lowfever_yelloweyesNode=new TreeNode("Does the patient have yellow eyes or skin/dark urine/experience change in colour of stool?");
                    TreeNode lowfever_commonfever_utiNode=new TreeNode("Male: Common Fever;Female:UTI");
                    TreeNode lowfever_hepatitisaNode=new TreeNode("Hepatitis A");
                    TreeNode lowfever_foodpoisoning=new TreeNode("Food Poisoning or Appendicitis");
                    TreeNode lowfever_commoncoldNode=new TreeNode("Common Cold");
                    TreeNode lowfever_hormonesNode=new TreeNode("Hormonal Fluctuations");
                     TreeNode noFeverLowLethargicNode = new TreeNode("Does the patient feel low or lethargic?");
                    TreeNode sadHopelessNode = new TreeNode("Does the patient feel sad, hopeless or empty");
                    TreeNode sleepPatternNode = new TreeNode("Is there a change in the patient's sleeping pattern?");
                    TreeNode worrinessNode = new TreeNode("Does the patient experience feelings of worriness and irritability?");
                    TreeNode worrinessIrritabilityNode = new TreeNode("Does the patient experience feelings of worriness and irritability?");
                    TreeNode appetiteNode = new TreeNode("Is there a change in the patient's appetite?");
                    TreeNode worriness_yesNode = new TreeNode("anxiety");
                    TreeNode periods_yesNode = new TreeNode("Does the patient face irregular periods?");
                    TreeNode weightNode = new TreeNode("Is there a sudden change in patient's weight?");
                    TreeNode overconcerned_weightNode = new TreeNode("Is the patient overconcerned about their weight?");
                    TreeNode oilyFaceNode_weightyes = new TreeNode("Does the patient has oily skin, hairloss or facial hair growth?");
                    TreeNode oilyFaceNode_weightno=new TreeNode("Does the patient has oily skin, hairloss or facial hair growth?");
                    TreeNode food_intakeNode=new TreeNode("Does the patient frequently keep a track of their food intake?");
                    TreeNode binge_eatNode=new TreeNode("Does the patient binge eat? or restricts themself from eating?");
                    TreeNode sedentary_lifestyleNode=new TreeNode("Does the patient leads a sedentary lifestyle?");
                    TreeNode seasonal_changesNode=new TreeNode("The change in appetite might be occuring due to seasonal changes");
                    TreeNode health_checkupNode=new TreeNode("Health checkup is required");
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                        TreeNode avoid_socialoutingsNode=new TreeNode("Does the patient avoid
social situations involving food?");
                        TreeNode health_consciousNode=new TreeNode("You are Health conscious");
                        TreeNode self_inducedNode=new TreeNode("Does the patient experience
purging behaviour?(self induced vomitting or extreme exercise.)");
                        TreeNode stress_eatingNode=new TreeNode("Stress Eating");
                        TreeNode eating_disorder_high=new TreeNode("Eating Disorder");
                        TreeNode eating_disorder_low=new TreeNode("Eating Disorder(Low
Probability)");
                        TreeNode stressNode = new TreeNode("Stress or bad lifestyle");
                        TreeNode pcosNode = new TreeNode("PCOS");
                        TreeNode menopauseNode = new TreeNode("Menopause");
                        TreeNode lossOfInterestNode = new TreeNode("Has the patient experienced
loss of interest or focus lately?");
                        TreeNode eatingHabitsNode = new TreeNode("Are there any changes in
patient's eating habits?");
                        TreeNode changeInLifeNode_100 = new TreeNode("Are there any major
changes in patient's life?");
                        TreeNode changeInLifeNode_80 = new TreeNode("Are there any major changes
in patient's life?");
                        TreeNode sweatingNode = new TreeNode("Does the patient experience
sweating, rapid heartbeat or shortness of breath");
                        TreeNode lonelinessNode = new TreeNode("Does the patient overthink or
experience feelings of loneliness?");
                        TreeNode muscleTensionNode = new TreeNode("Does the patient experience
muscle cramps(clenching of fist, jaw)/trembling?");
                        TreeNode panicAttacksNode = new TreeNode("Panic Attacks");
                        TreeNode thoughtsOfDying_100Node = new TreeNode("Is the patient
experiencing a thoughts of dying or losing control?");
                        TreeNode thoughtsOfDying_80Node = new TreeNode("Is the patient
experiencing a thoughts of dying or losing control?");
                        TreeNode depression_100Node = new
TreeNode("Depression(Probability:100%)");
                         TreeNode depression_lowNode = new TreeNode("Depression(Lower Probability
or Teporary depresion)");
                         TreeNode dysthymiaNode = new TreeNode("dysthymia");
                        TreeNode anxietyNode = new TreeNode("Anxiety");
                        TreeNode skin_relatedNode = new TreeNode("Is the patient facing any skin
related issues?");
                        TreeNode dry_skinNode = new TreeNode("Does the patient have dry,cracked or
itchy skin?");
                        TreeNode rashesNode = new TreeNode("Does the patient have rashes?");
                        TreeNode acne_dryskinNode = new TreeNode("Does the patient have acne?");
                        TreeNode acneNode = new TreeNode("Does the patient have acne?");
                        TreeNode acnecardNode = new TreeNode("Acne");
                        TreeNode seasonal_dryskinNode = new TreeNode("The patient is having dry
and itchy skin due to seasonal changes");
                        TreeNode coin_rashesNode = new TreeNode("Does the patient have coin
shaped rashes?");
                        TreeNode darkening_skinNode = new TreeNode("Is the patient experiencing
darkening of skin?");
                        TreeNode hyperpigmentationNode=new TreeNode("Hyperpigmentation");
                        TreeNode dehydrated_skinNode=new TreeNode("Dehydrated skin");
                        TreeNode ringwormNode=new TreeNode("Nummular dermatitis or Ringworm");
                        TreeNode blisterNode=new TreeNode("Does the patient have fluid filled
blisters?");
                        TreeNode mouth_chinNode=new TreeNode("Is it around mouth chin or nose?");
                        TreeNode hairloss_rashNode=new TreeNode("Does the patient have hair loss at
the rash site?");
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                    TreeNode skin_irritatingNode=new TreeNode("Has the patient come in contact
with any substance which might cause skin allergies or any person who has skin related issues?");
                    TreeNode impetigoNode=new TreeNode("Impetigo");
                    TreeNode contact_dermatitisNode=new TreeNode("Contact Dermatitis");
                    TreeNode eczemaNode=new TreeNode("Eczema");
                    root.setYesNode(highfeverNode);
                    root.setNoNode(noFeverLowLethargicNode);
                    highfeverNode.setYesNode(recent_travelNode);
                    highfeverNode.setNoNode(lowgradefeverNode);
                    lowgradefeverNode.setYesNode(lowfever_recentTravelNode);
                    lowgradefeverNode.setNoNode(lowfever_recentTravelNode);
                    recent_travelNode.setYesNode(food_yesNode);
                    recent_travelNode.setNoNode(food_yesNode);
                    food_yesNode.setYesNode(weaknessNode);
                    food_yesNode.setNoNode(coughNode);
                    weaknessNode.setYesNode(diarrhoeaNode);
                    weaknessNode.setNoNode(diarrhoeaNode);
                   diarrhoeaNode.setYesNode(vomitting_100Node);
                   diarrhoeaNode.setNoNode(vomitting_40Node);
                   vomitting_100Node.setYesNode(TyphoidNode);
                   vomitting_100Node.setNoNode(TyphoidNode);
                   vomitting_40Node.setYesNode(Typhoid_40Node);
                   vomitting_40Node.setNoNode(NoTyphoidNode);
                   coughNode.setYesNode(cough_fatigue_lossofappetiteNode);
                   coughNode.setNoNode(common_feverNode);
                   cough_fatigue_lossofappetiteNode.setYesNode(chronic_diseaseNode);
                   cough_fatigue_lossofappetiteNode.setNoNode(common_feverNode);
                   chronic_diseaseNode.setYesNode(smoking_100Node);
                   chronic_diseaseNode.setNoNode(smoking_Node);
                   smoking_100Node.setYesNode(PneumoniaNode);
                   smoking_100Node.setNoNode(PneumoniaNode);
                   smoking_Node.setNoNode(PneumoniaNode_80);
                   smoking_Node.setNoNode(PneumoniaNode_low);
                    lowfever_recentTravelNode.setYesNode(lowfever_foodNode);
                    lowfever_recentTravelNode.setNoNode(lowfever_foodNode);
                    lowfever_foodNode.setYesNode(lowfever_weaknessNode);
                    lowfever_foodNode.setNoNode(lowfever_weaknessNode);
                    lowfever_weaknessNode.setYesNode(lowfever_stomachpainNode);
                    lowfever_weaknessNode.setNoNode(lowfever_runnynoseNode);
                    lowfever_stomachpainNode.setYesNode(lowfever_yelloweyesNode);
                    lowfever_stomachpainNode.setNoNode(lowfever_commonfever_utiNode);
                    lowfever_yelloweyesNode.setYesNode(lowfever_hepatitisaNode);
                    lowfever_yelloweyesNode.setNoNode(lowfever_foodpoisoning);
                    lowfever_runnynoseNode.setYesNode(lowfever_commoncoldNode);
                    lowfever_runnynoseNode.setNoNode(lowfever_hormonesNode);

                   nofeverNode.setYesNode(noFeverLowLethargicNode);
                   nofeverNode.setNoNode(noFeverLowLethargicNode);
                   noFeverLowLethargicNode.setYesNode(sadHopelessNode);
                   sadHopelessNode.setYesNode(sleepPatternNode);
                   sadHopelessNode.setNoNode(worrinessNode);
                   worrinessNode.setYesNode(anxietyNode);
                   worrinessNode.setNoNode(appetiteNode);
                   sleepPatternNode.setYesNode(lossOfInterestNode);
                   sleepPatternNode.setNoNode(lossOfInterestNode);
                   lossOfInterestNode.setYesNode(eatingHabitsNode);
          lossOfInterestNode.setNoNode(worrinessIrritabilityNode);
                    worrinessIrritabilityNode.setYesNode(sweatingNode);
                    worrinessIrritabilityNode.setNoNode(lonelinessNode);
                    lonelinessNode.setYesNode(dysthymiaNode);
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 lonelinessNode.setNoNode(dysthymiaNode);
sweatingNode.setYesNode(muscleTensionNode);
sweatingNode.setNoNode(anxietyNode);
muscleTensionNode.setYesNode(panicAttacksNode);
muscleTensionNode.setNoNode(panicAttacksNode);
panicAttacksNode.setYesNode(anxietyNode);
panicAttacksNode.setNoNode(anxietyNode);
eatingHabitsNode.setYesNode(changeInLifeNode_100);
eatingHabitsNode.setNoNode(changeInLifeNode_80);
changeInLifeNode_100.setYesNode(thoughtsOfDying_100Node);
changeInLifeNode_100.setNoNode(thoughtsOfDying_80Node);
changeInLifeNode_80.setYesNode(depression_100Node);
changeInLifeNode_80.setNoNode(depression_100Node);
thoughtsOfDying_100Node.setYesNode(depression_100Node);
thoughtsOfDying_100Node.setNoNode(depression_100Node);
thoughtsOfDying_80Node.setYesNode(depression_100Node);
thoughtsOfDying_80Node.setNoNode(depression_lowNode);
appetiteNode.setYesNode(periods_yesNode);
appetiteNode.setNoNode(periods_yesNode);
periods_yesNode.setYesNode(weightNode);
periods_yesNode.setNoNode(overconcerned_weightNode);
weightNode.setYesNode(oilyFaceNode_weightyes);
weightNode.setNoNode(oilyFaceNode_weightno);
oilyFaceNode_weightyes.setYesNode(pcosNode);
oilyFaceNode_weightyes.setNoNode(menopauseNode);
oilyFaceNode_weightno.setYesNode(stressNode);
oilyFaceNode_weightno.setNoNode(stressNode);
overconcerned_weightNode.setYesNode(food_intakeNode);
overconcerned_weightNode.setNoNode(sedentary_lifestyleNode);
food_intakeNode.setYesNode(binge_eatNode);
food_intakeNode.setNoNode(seasonal_changesNode);
sedentary_lifestyleNode.setYesNode(health_checkupNode);
sedentary_lifestyleNode.setNoNode(health_checkupNode);
binge_eatNode.setYesNode(avoid_socialoutingsNode);
binge_eatNode.setNoNode(health_consciousNode);
avoid_socialoutingsNode.setYesNode(self_inducedNode);
avoid_socialoutingsNode.setNoNode(stress_eatingNode);
self_inducedNode.setYesNode(eating_disorder_high);
self_inducedNode.setNoNode(eating_disorder_low);
noFeverLowLethargicNode.setNoNode(skin_relatedNode);
skin_relatedNode.setYesNode(dry_skinNode);
skin_relatedNode.setNoNode(health_checkupNode);
dry_skinNode.setYesNode(rashesNode);
dry_skinNode.setNoNode(acneNode);
rashesNode.setYesNode(coin_rashesNode);
rashesNode.setNoNode(acne_dryskinNode);
acne_dryskinNode.setYesNode(acnecardNode);
acne_dryskinNode.setNoNode(dehydrated_skinNode);

acneNode.setYesNode(acnecardNerpigmentationNode);
darkening_skinNode.setNoNode(dehydrated_skinNode);
coin_rashesNode.setYesNode(ringworode);
acneNode.setNoNode(darkening_skinNode);
darkening_skinNode.setYesNode(hypmNode);
coin_rashesNode.setNoNode(blisterNode);
blisterNode.setYesNode(mouth_chinNode);
blisterNode.setNoNode(hairloss_rashNode);
hairloss_rashNode.setYesNode(eczemaNode);
hairloss_rashNode.setNoNode(seasonal_dryskinNode);
mouth_chinNode.setYesNode(impetigoNode);
```

```
        mouth_chinNode.setNoNode(skin_irritatingNode);
        skin_irritatingNode.setYesNode(contact_dermatitisNode);
        skin_irritatingNode.setNoNode(seasonal_dryskinNode);

    }

    // Perform diagnosis based on user input
    private static void diagnose() {
        Scanner scanner = new Scanner(System.in);
        TreeNode currentNode = root;
        Details.details();
        while (true) {
            System.out.println(currentNode.getName() + " (yes/no)");
            String answer = scanner.nextLine().toLowerCase();
            if (answer.equals("yes")) {
                currentNode = currentNode.getYesNode();
            } else if (answer.equals("no")) {
                currentNode = currentNode.getNoNode();
            } else {
                System.out.println("Invalid input. Please enter 'yes' or 'no'.");
                continue;
            }
            if (currentNode == null) {
                System.out.println("Diagnosis: Unknown");
                break;
            }
            if (currentNode.getYesNode() == null && currentNode.getNoNode() == null) {
                System.out.println("Diagnosis: " + currentNode.getName());
                MedicalCardDisplay.displayMedicalCard(currentNode.getName());
                break;
            }
        }
        scanner.close();
    }
}
```