//POP

```java
import java.awt.Container;
import java.awt.Image;
import java.awt.Point;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import java.io.File;
import java.io.IOException;

import javax.swing.Timer;
import javax.imageio.ImageIO;
import javax.swing.ImageIcon;
import javax.swing.JFrame;
import javax.swing.JLabel;
import javax.swing.JTextArea;
import javax.swing.JTextField;


public class popAI {
public static JFrame fr;
public static JLabel l;
public static JTextArea planf;
public static Image backI;
public static ImageIcon backi;
public static Container c;
public static String action[]={"start","Finish","doSubmission","Publish","Give Exam","Apply
for studies","Give GRE","Shortlist course"},effect[]={"TermEnd() ^ AllAssignmentChecked() ^
PaperWritingStarted() ^ ProjectSelected() ^
NoFamilyFunction()","","SubmissionDone()","PaperPublished()","ExamFinish()","AppliedGRE
()","GREGiven()","CoursesFixed()"};
public static String preconditions[]={" ","AppliedForHigherStudies()","TermEnd() ^
AllAssignmentsChecked() ^ NoFamilyFunction()","PaperWritingStarted() ^
ProjectSelected()","SubmissionDone() ^ PaperPublished()","ExamFinished() ^
GREGiven()","SubmissionFinished() ^ ExamFinished()","GREGiven() ^ ExamFinished()"};
private JLabel First;
private JLabel Second;
private JLabel third;
public static int i;
public static Timer tm;
private JLabel fourth;
        public popAI() throws Exception {
                fr=new JFrame();
                fr.setBounds(0, 0, 1300, 700);
                c=fr.getContentPane();
                l=new JLabel();
                l.setBounds(50, 100, 500, 450);
```

```java
planf=new JTextArea();
planf.setBounds(630, 100, 800, 550);

First = new JLabel();
First.setBounds(100, 111, 361, 190);
First.setOpaque(true);

Second = new JLabel();
Second.setBounds(83, 305, 205, 245);
Second.setOpaque(true);

backI = ImageIO.read(new File("/BE/Cl2 Pract/src/1.png"));
backI = backI.getScaledInstance(l.getWidth(),
l.getHeight(),Image.SCALE_REPLICATE);
backi = new ImageIcon(backI);
l.setIcon(backi);
planf.append("-------------Partial Order planning------------\n\n");
System.out.print("prec::"+effect.length);

third = new JLabel();
third.setBounds(486, 265, 83, 63);
third.setOpaque(true);
fourth = new JLabel();
fourth.setBounds(283, 298, 275, 253);
fourth.setOpaque(true);
fr.getContentPane().add(fourth);

fr.getContentPane().add(third);
fr.getContentPane().add(First);
fr.getContentPane().add(Second);
c.add(planf);
c.add(l);
fr.getContentPane().setLayout(null);

tm=new Timer(2000, new ActionListener() {
@Override
        public void actionPerformed(ActionEvent e) {

                if(i<8){
                if(i==1){
                                First.setVisible(false);

                }
                        else if(i==2){
                                Second.setVisible(false);
```

```java
                    }
                    else if(i==3){
                            fourth.setVisible(false);
                            third.setVisible(false);
                    }

                            planf.append("Action: "+action[i]+"\n"+"Preconditions:
"+preconditions[i]+"\nEffects: "+effect[i]+"\n\n");
                            i++;
                    }
                    else{
                            tm.stop();
                    }
                }
            });

            tm.start();

            fr.setVisible(true);
    }

    public static void main(String arr[]) throws Exception{
            popAI a=new popAI();
    }
}
```

_____Output_____