

```

package programmingAssignment3;

import java.util.Scanner;

public class Claymation
{
    public static void main(String[] args)
    {
        ///////////  DECLARATIONS AND COMPONENTS  ///////////
        JFrame frame;    // The frame for holding everything
        ImageIcon image;  // The picture we will display
        JLabel imageLabel; // The picture label
        JScrollPane sp;   // The scrolling pane will contain the label
                        // that holds the picture
        Integer Objecti = null; //An integer object

        ///////////          ALGORITHM          ///////////

        //Ask to play movie forwards or backwards.

        System.out.println("Do you want to play movie forwards, backwards, or quit?");

        final int SENTINEL = 20;
        int number;

        Scanner scan = new Scanner( System.in );

        //priming read
        System.out.print("Enter an integer, or 20 to stop > " );
        number = scan.nextInt( );

        while ( number != SENTINEL )
        {
            //processing

            if ( number < 20 )
            {
                //Ten pictures, so write a loop that executes ten times
                for (int i = 1; i < 11; i++)
                {
                    //Step 1: Create an Integer object from int i
                    Objecti = new Integer(i);

                    //Step 2: image is created as "1.jpg" "2.jpg" and so on
                    image = new ImageIcon (Objecti.toString()+".jpg");

                    //Step 3: Set up the Frame
                    frame = new JFrame ("Building Picture");
                    frame.setDefaultCloseOperation (JFrame.EXIT_ON_CLOSE);

                    //Step 4: Show the picture
                    imageLabel = new JLabel (image);
                    sp = new JScrollPane (imageLabel);
                    sp.setPreferredSize(new Dimension (400,400));
                    frame.getContentPane().add(sp);
                    frame.pack();
                    frame.setVisible(true);

                    //Step 5: Pause long enough to view the picture

```

Claymation.java

```
        for (long j = 0; j < 1000000000; j++);

        }//for
    }//if
    else
    {
        //Ten pictures, so write a loop that executes ten times
        for (int i = 10; i > 0; i--)
        {
            //Step 1: Create an Integer object from int i
            Objecti = new Integer(i);

            //Step 2: image is created as "1.jpg" "2.jpg" and so on
            image = new ImageIcon (Objecti.toString()+".jpg");

            //Step 3: Set up the Frame
            frame = new JFrame ("Building Picture");
            frame.setDefaultCloseOperation (JFrame.EXIT_ON_CLOSE);

            //Step 4: Show the picture
            imageLabel = new JLabel (image);
            sp = new JScrollPane (imageLabel);
            sp.setPreferredSize(new Dimension (400,400));
            frame.getContentPane().add(sp);
            frame.pack();
            frame.setVisible(true);

            //Step 5: Pause long enough to view the picture
            for (long j = 0; j < 1000000000; j++);

        }//for
    }//else
    //Update read
    System.out.print("Enter an integer, or 20 to stop > ");
    number = scan.nextInt();
} //while
} //main
} //class
```