

```

// definition of class Assist
// class Assist represents candidates for a consultant job

public class Assist {

    private boolean[][] table = {{true, true, true, false, false, true},
                                   {true, false, true, true, false, true},
                                   {false, true, true, false, true, true},
                                   {true, true, true, false, false, true},
                                   {true, true, false, true, true, true}};

    private int [] marks = {90, 86, 84, 92, 89 };

// choose the best candidate
public int choose()
{
    int max = 0, best = 0;

    for ( int i = 0; i < table.length; i++ )
        if ( table [i] [0] && table [i] [1] && marks [i] > 85 )
            {
                int count = 0;
                for ( int j = 0; j < table[0].length ; j++ )
                    if ( table [i] [j] )
                        count++;
                if (count > max)
                    {
                        max = count;
                        best = i;
                    }
            }
    return best;
}

public boolean compare ( int student1, int student2)
{
    if ( Math.abs ( marks [student1] - marks [student2] ) > 2 )
        return false;
    for ( int j = 0; j < table[0].length ; j++ )
        if ( table [student1] [j] != table [student2] [j] )
            return false;
    return true;
}
}

```

```

import java.awt.*;
import java.applet.*;
import java.awt.event.*; // import the java.awt.event package

public class TestAssist extends Applet implements ActionListener{

    Button chooseButton;
    Label  label1, label2, output;
    TextField candidatelText, candidate2Text;
    Assist year2000;          // define object year2000 of type Assist

    public void init()
    {
        // initialize the Assist object
        year2000= new Assist();
        // set up button, labels and text fields
        chooseButton = new Button("Choose the candidate");
        add(chooseButton);
        chooseButton.addActionListener(this);
        label1 = new Label( "Enter number of first student" );
        candidatelText = new TextField( 1 );
        add( label1 );
        add( candidatelText );
        label2 = new Label( "Enter number of second student" );
        candidate2Text = new TextField( 1 );
        add( label2 );
        add( candidate2Text );

        output = new Label( "The result will be written here");
        add ( output);
        candidate2Text.addActionListener( this );
    }

    public void actionPerformed( ActionEvent e )
    {
        // find the source of the event
        if (e.getSource() == chooseButton )
        {
            // send message to object to choose the best candidate
            int best = year2000.choose();
            output.setText ( "The best candidate is " + best );
        }
        else
        {
            int one = Integer.parseInt ( candidatelText.getText() );
            int two = Integer.parseInt ( candidate2Text.getText() );
            if ( year2000.compare (one, two ) )
                output.setText ( "The candidates are equal!" );
            else
                output.setText ( "The candidates are NOT equal");
        }
    }
}

```