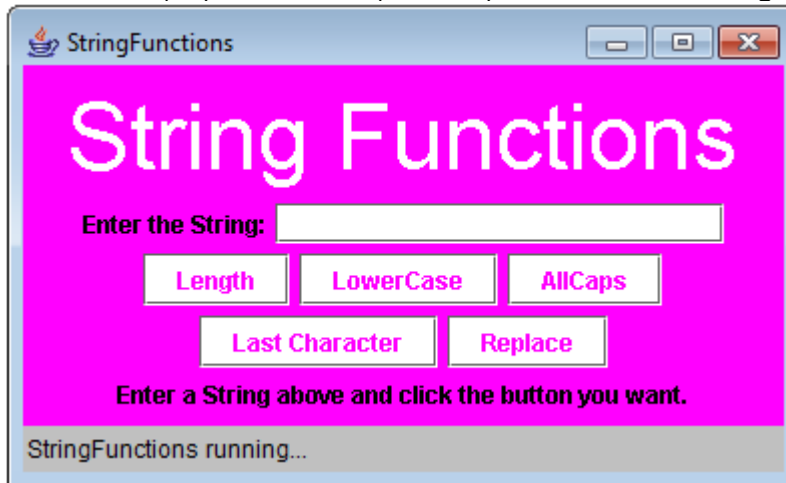


B2 String Functions

(do this one after A3: John Jacob....)

Make this applet. The TextField (s1) and Label (answer) at the bottom are global.



This is the output from the replace button: (I choose to replace H with X).



A warning:

- Enter the String BEFORE you press the buttons.
- Enter values in the dialog boxes.

Otherwise, you will get the following and need to re-run your program.

A screenshot of a Java IDE window titled "StringFunctions - Running - Standard Input/Output - Ready to Program". The window shows a stack trace of the program's execution. The stack trace starts with "at java.lang.String.charAt(Unknown Source)" and ends with "at java.awt.EventQueue.run(Unknown Source)". The stack trace is as follows:

```
at java.lang.String.charAt(Unknown Source)
at StringFunctions.actionPerformed(StringFunctions.java:97)
at javax.swing.AbstractButton.fireActionPerformed(Unknown Source)
at javax.swing.AbstractButton$ForwardActionEvents.actionPerformed(Unknown Source)
at javax.swing.DefaultButtonModel.fireActionPerformed(Unknown Source)
at javax.swing.DefaultButtonModel.setPressed(Unknown Source)
at javax.swing.plaf.basic.BasicButtonListener.mouseReleased(Unknown Source)
at java.awt.Component.processMouseEvent(Unknown Source)
at java.awt.Component.processEvent(Unknown Source)
at java.awt.Container.processEvent(Unknown Source)
at java.awt.Component.dispatchEventImpl(Unknown Source)
at java.awt.Container.dispatchEventImpl(Unknown Source)
at java.awt.Component.dispatchEvent(Unknown Source)
at java.awt.LightweightDispatcher.retargetMouseEvent(Unknown Source)
at java.awt.LightweightDispatcher.processMouseEvent(Unknown Source)
at java.awt.LightweightDispatcher.dispatchEvent(Unknown Source)
at java.awt.Container.dispatchEventImpl(Unknown Source)
at java.awt.Component.dispatchEvent(Unknown Source)
at java.awt.EventQueue.dispatchEvent(Unknown Source)
at java.awt.EventQueue.dispatchEvent(Unknown Source)
at java.awt.EventQueue.dispatchEvent(Unknown Source)
at java.awt.EventQueue.run(Unknown Source)
at java.awt.EventQueue.run(Unknown Source)
```

Starter Code:

```
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
import java.applet.Applet;

public class StringFunctions extends Applet implements ActionListener
{
    JLabel answer;
    JTextField s1;

    public void init ()
    {
        resize (380, 180);

    }

    public void actionPerformed (ActionEvent e)
    {
        String s = s1.getText ();
        if (e.getActionCommand ().equals ("Length"))
        {
        }
        else if (e.getActionCommand ().equals ("Lower Case"))
        {
        }
        else if (e.getActionCommand ().equals ("AllCaps"))
        {
        }
        else if (e.getActionCommand ().equals ("Last Character"))
        {
        }
        else if (e.getActionCommand ().equals ("Replace"))
        {
            String input = JOptionPane.showInputDialog ("Please enter the character to replace:");
            String input2 = JOptionPane.showInputDialog ("Please enter the character to replace it with:");
            char a = input.charAt (0); //the first char you need
            char b = input2.charAt (0); //the second char you need
            s = s.replace (a, b);
            answer.setText (s);
        }
    }
}

} //end AP
} // end class
```