

# B4 Substitution Cipher

A simple form of encryption is substituting letters into the text.

In this cipher, the key is like this:

|          |   |   |   |    |   |   |   |   |   |   |
|----------|---|---|---|----|---|---|---|---|---|---|
| Original | a | e | i | o  | u | t | h | r | s | n |
| Encoded  | 2 | @ | # | \$ | % | 4 | & | * | { | 5 |



Code the applet.

The textField and output label at the bottom are global.

You need to finish the replace statements in actionPerformed.

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

public class substitutionCipher extends Applet implements ActionListener
{
    JLabel output;
    JTextField word;

    public void init ()
    {
        resize (450, 150);
    }

    public void actionPerformed (ActionEvent e)
    {
        String a = word.getText ();
        a = a.replace ('a', '2'); //more of these are needed for the other letters
        output.setText (a);
    }
}
```