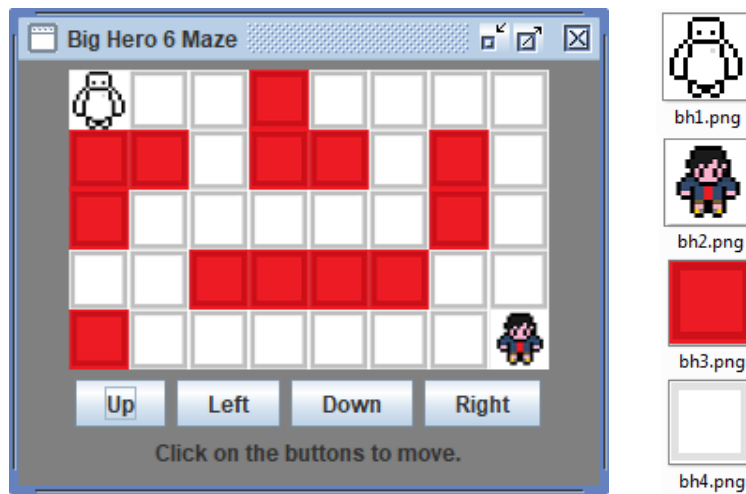


Mac/New Eclipse Version of the Maze



```
import java.awt.*;
import java.awt.event.*;
import javax.swing.*;
import javax.swing.border.*;
//Purpose: To make a maze for the character to walk around

public class BigHero6 extends JPanel implements ActionListener
{
    //Note: Baymax (1) is NOT in the array
    int hero[] [] = {{4, 4, 4, 3, 4, 4, 4, 4},
                    {3, 3, 4, 3, 3, 4, 3, 4},
                    {3, 4, 4, 4, 4, 4, 3, 4},
                    {4, 4, 3, 3, 3, 3, 4, 4},
                    {3, 4, 4, 4, 4, 4, 4, 2}};

    int row = 5;
    int col = 8;
    JLabel pics[] = new JLabel [row * col];
    JLabel feedback;

    //Where did Baymax begin?
    int x = 0;
    int y = 0;

    public BigHero6 ()
    {
        setBackground (Color.gray);
        //code to build the screen
        Panel grid = new Panel (new GridLayout (row, col));
        int m = 0;
        for (int i = 0 ; i < row ; i++)
        {
            for (int j = 0 ; j < col ; j++)
            {
                pics [m] = new JLabel (createImageIcon ("bh" + hero [i] [j] + ".png"));
                pics [m].setPreferredSize (new Dimension (32, 32));
                grid.add (pics [m]);
                m++;
            }
        }
        add (grid);
    }
}
```

```

//Movement buttons
JButton up = new JButton ("Up");
up.setActionCommand ("up");
up.addActionListener (this);
add (up);
JButton left = new JButton ("Left");
left.setActionCommand ("left");
left.addActionListener (this);
add (left);
JButton down = new JButton ("Down");
down.setActionCommand ("down");
down.addActionListener (this);
add (down);
JButton right = new JButton ("Right");
right.setActionCommand ("right");
right.addActionListener (this);
add (right);
feedback= new JLabel("Click on the buttons to move.");
add(feedback);
//move Baymax to the start position
pics [x * col + y].setIcon (createImageIcon ("bh1.png"));
}

public void actionPerformed (ActionEvent e)
{
//Up direction -----
if (e.getActionCommand ().equals ("up"))
{
    if (x - 1 < 0)
        feedback.setText ("Off the board!!");
    else if (hero [x - 1] [y] != 4)
        feedback.setText ("There is a wall.");
    else
    { feedback.setText ("OK! Moving up.");
      pics [x * col + y].setIcon (createImageIcon ("bh4.png"));
      x--;
      pics [x * col + y].setIcon (createImageIcon ("bh1.png"));
    }
}
//Down direction -----
else if (e.getActionCommand ().equals ("down"))
{
    if (x +1 >= row)
        feedback.setText ("Off the board!!");
    else if (hero [x+1] [y] != 4)
        feedback.setText ("There is a wall.");
    else
    {
        feedback.setText ("OK! Moving down.");
        pics [x * col + y].setIcon (createImageIcon ("bh4.png"));
        x++;
        pics [x * col + y].setIcon (createImageIcon ("bh1.png"));
    }
}
//Right direction -----
else if (e.getActionCommand ().equals ("right"))
{
    if (y + 1 >= col)
        feedback.setText ("Off the board!!");
    else if (hero [x] [y + 1] != 4)
        feedback.setText ("There is a wall.");
    else
    {
        feedback.setText ("OK! Moving right.");
    }
}
}

```

```

        pics [x * col + y].setIcon (createImageIcon ("bh4.png"));
        y++;
        pics [x * col + y].setIcon (createImageIcon ("bh1.png"));
    }
}
//Left direction -----
else if (e.getActionCommand ().equals ("left"))
{
    if (y-1 < 0)
        feedback.setText ("Off the board!!");
    else if (hero [x] [y-1] != 4)
        feedback.setText ("There is a wall.");
    else
    {
        feedback.setText ("OK! Moving left.");
        pics [x * col + y].setIcon (createImageIcon ("bh4.png"));
        y--;
        pics [x * col + y].setIcon (createImageIcon ("bh1.png"));
    }
}
}

protected static ImageIcon createImageIcon (String path)
{
    java.net.URL imgURL = BigHero6.class.getResource (path);
    if (imgURL != null)
        return new ImageIcon (imgURL);
    else
        return null;
}

public static void main (String[] args)
{
    JFrame.setDefaultLookAndFeelDecorated (true);
    //Create and set up the window.
    JFrame frame = new JFrame ("Big Hero 6 Maze");
    frame.setDefaultCloseOperation (JFrame.EXIT_ON_CLOSE);
    //Create and set up the content pane.
    JComponent newContentPane = new BigHero6 ();
    newContentPane.setOpaque (true);
    frame.setContentPane (newContentPane);
    frame.setSize (320, 260);
    frame.setVisible (true);
}
}

```