INFORMATICS
INSTITUTE OF
TECHNOLOGY

Informatics Institute of technology

Coursework 1 – Guess the Word Game

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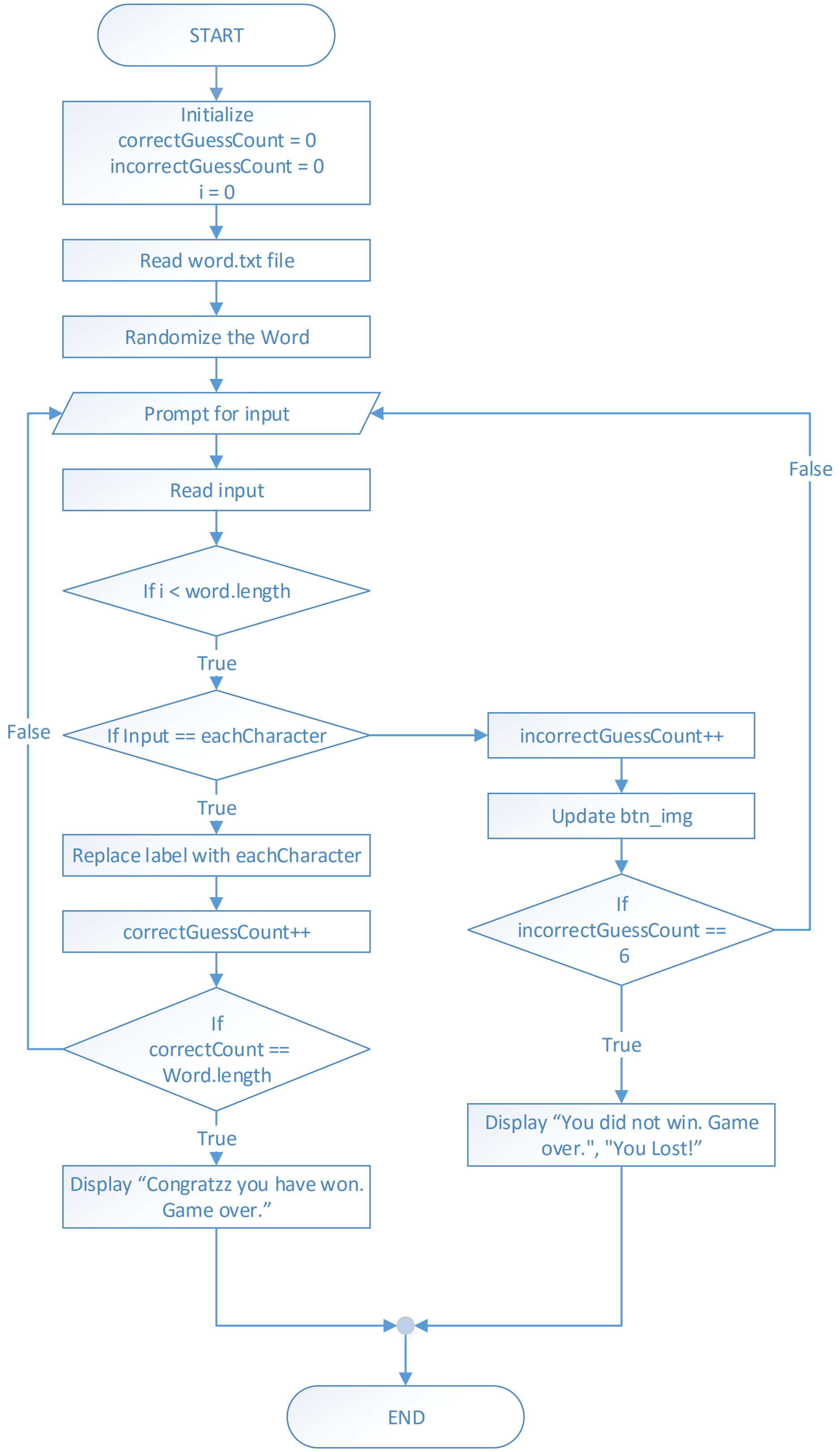
Course: - BSc [Hons] Computer Science

Module Code: - ECSC410

Module Name: - Software Development Principles 1

Flowchart

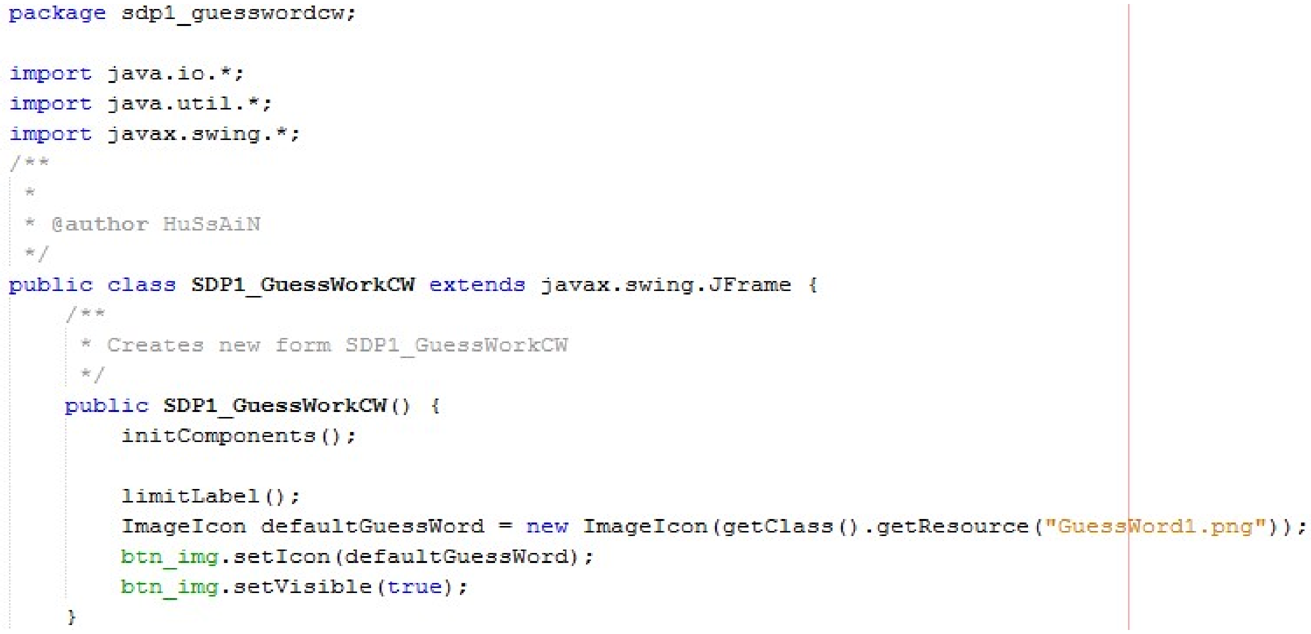

START
Initialize
correctGuessCount = 0
incorrectGuessCount = 0
i = 0
Read word.txt file
Randomize the Word
Prompt for input
Read input
If i < word.length
True
If Input == eachCharacter
False
True
Replace label with eachCharacter
correctGuessCount++
If
correctCount ==
Word.length
True
Display "Congratzz you have won. Game over."
incorrectGuessCount++
Update btn_img
If
incorrectGuessCount ==
6
False
True
Display "You did not win. Game over.", "You Lost!"
END

Pseudocodes

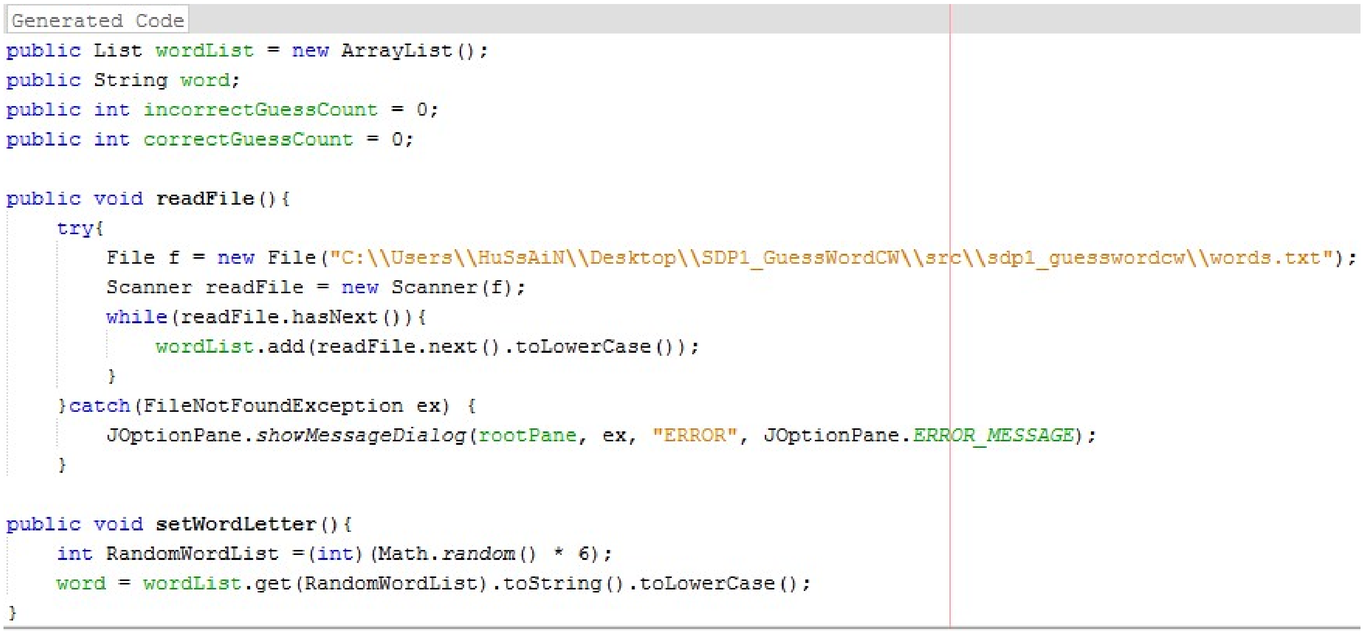
SDP1_GuessWordCW

```
initialize correctGuessCount = 0
initialize incorrectGuessCount = 0
initialize i = 0
Read word.txt file
Ramdomize the word
Get Input
if i < word
    if input equals to eachCharacter
        Replace label with eachCharacter
        correctGuessCount++
        If correctGuessCount equals to word length
            Display "Congratzz you have won. Game over."
    Else
        incorrectGuessCount++
        Update btn_img
        If incorrectGuessCount equals to 6
        Display "You did not win. Game over."
END
```

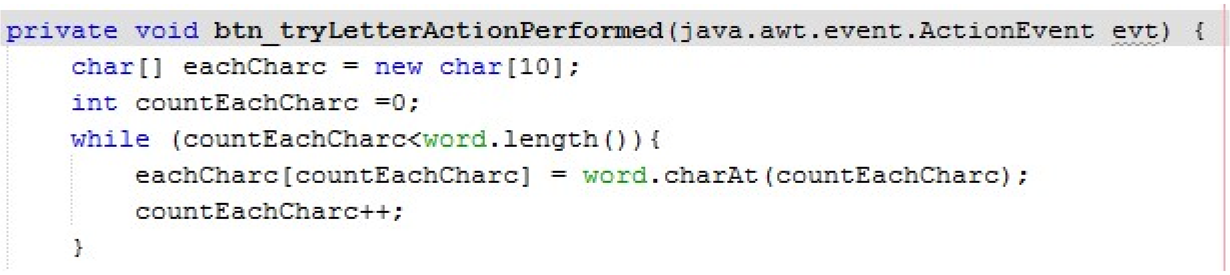
Source Codes



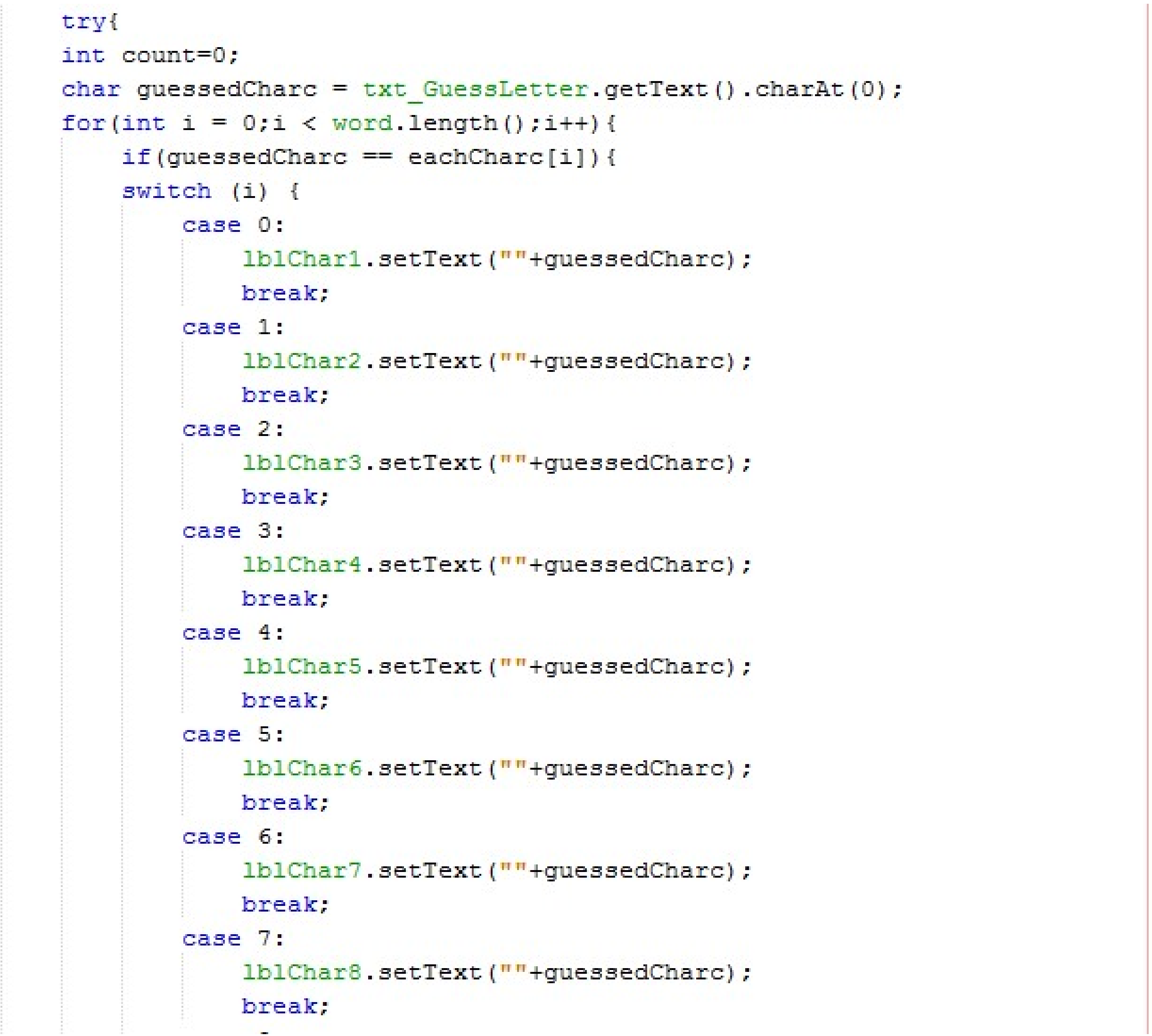
```
package sdp1_guesswordcw;

import java.io.*;
import java.util.*;
import javax.swing.*;
/**
 *
 * @author HuSsAiN
 */
public class SDP1_GuessWorkCW extends javax.swing.JFrame {
    /**
     * Creates new form SDP1_GuessWorkCW
     */
    public SDP1_GuessWorkCW() {
        initComponents();

        limitLabel();
        ImageIcon defaultGuessWord = new ImageIcon(getClass().getResource("GuessWord1.png"));
        btn_img.setIcon(defaultGuessWord);
        btn_img.setVisible(true);
    }
```



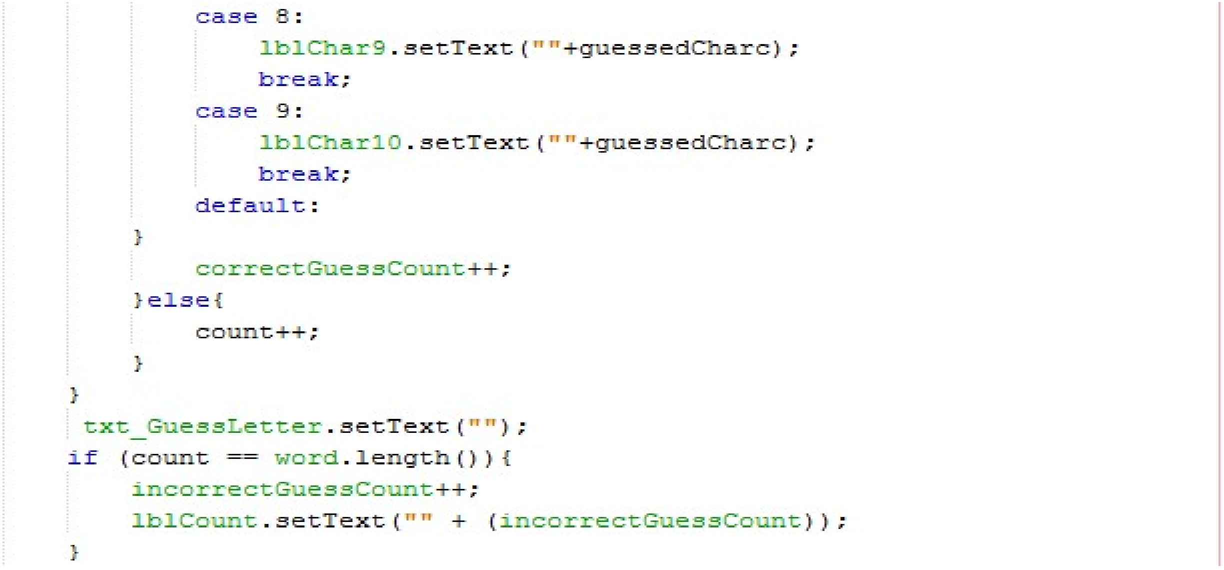
```
Generated Code
public List wordList = new ArrayList();
public String word;
public int incorrectGuessCount = 0;
public int correctGuessCount = 0;

public void readFile(){
    try{
        File f = new File("C:\\Users\\HuSsAiN\\Desktop\\SDP1_GuessWordCW\\src\\sdp1_guesswordcw\\words.txt");
        Scanner readFile = new Scanner(f);
        while(readFile.hasNext()){
            wordList.add(readFile.next().toLowerCase());
        }
    }catch(FileNotFoundException ex) {
        JOptionPane.showMessageDialog(rootPane, ex, "ERROR", JOptionPane.ERROR_MESSAGE);
    }

public void setWordLetter(){
    int RandomWordList =(int)(Math.random() * 6);
    word = wordList.get(RandomWordList).toString().toLowerCase();
}
```



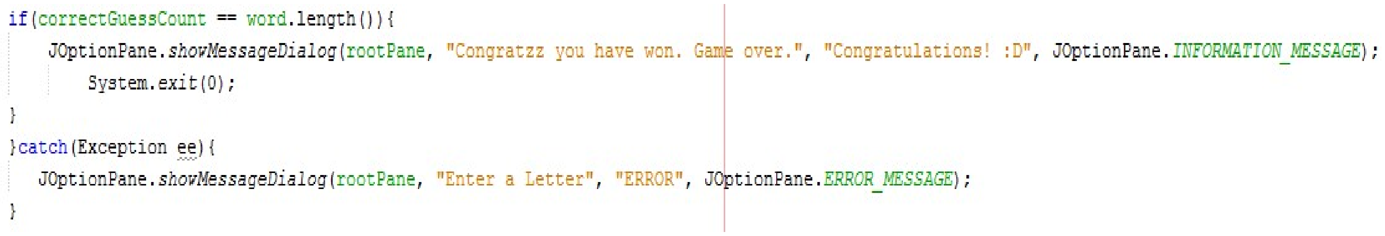
```
private void btn_tryLetterActionPerformed(java.awt.event.ActionEvent evt) {
    char[] eachCharc = new char[10];
    int countEachCharc =0;
    while (countEachCharc<word.length()){
        eachCharc[countEachCharc] = word.charAt(countEachCharc);
        countEachCharc++;
    }
```



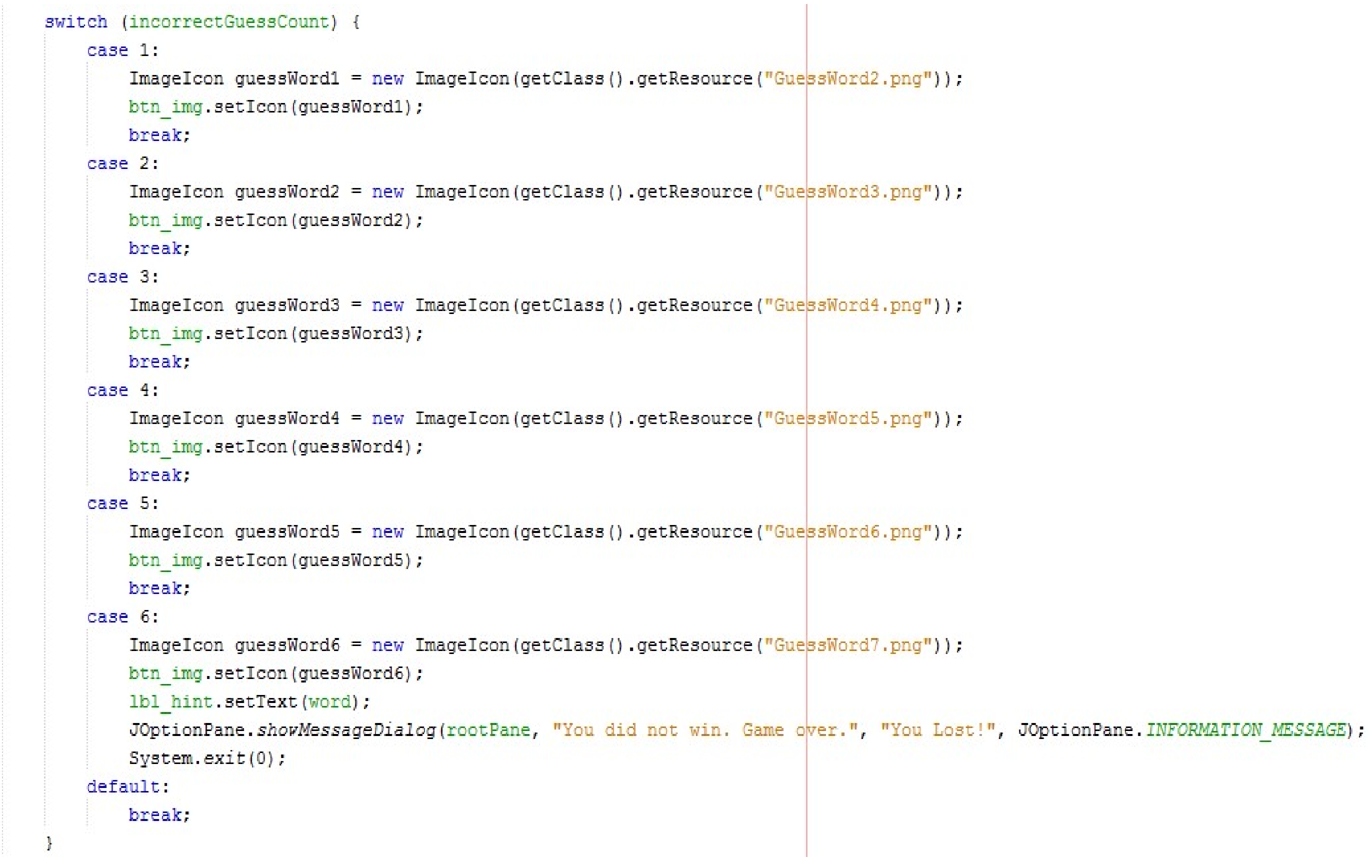
```
try{
int count=0;
char guessedCharc = txt_GuessLetter.getText().charAt(0);
for(int i = 0;i < word.length();i++){
    if(guessedCharc == eachCharc[i]){
    switch (i) {
        case 0:
            lblChar1.setText(""+guessedCharc);
            break;
        case 1:
            lblChar2.setText(""+guessedCharc);
            break;
        case 2:
            lblChar3.setText(""+guessedCharc);
            break;
        case 3:
            lblChar4.setText(""+guessedCharc);
            break;
        case 4:
            lblChar5.setText(""+guessedCharc);
            break;
        case 5:
            lblChar6.setText(""+guessedCharc);
            break;
        case 6:
            lblChar7.setText(""+guessedCharc);
            break;
        case 7:
            lblChar8.setText(""+guessedCharc);
            break;
```



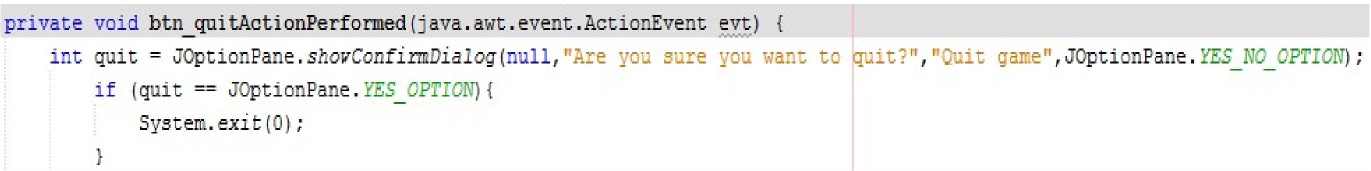
```
        case 8:
            lblChar9.setText(""+guessedCharc);
            break;
        case 9:
            lblChar10.setText(""+guessedCharc);
            break;
        default:
    }
        correctGuessCount++;
    }else{
        count++;
    }
}
 txt_GuessLetter.setText("");
if (count == word.length()){
    incorrectGuessCount++;
    lblCount.setText("" + (incorrectGuessCount));
}
```



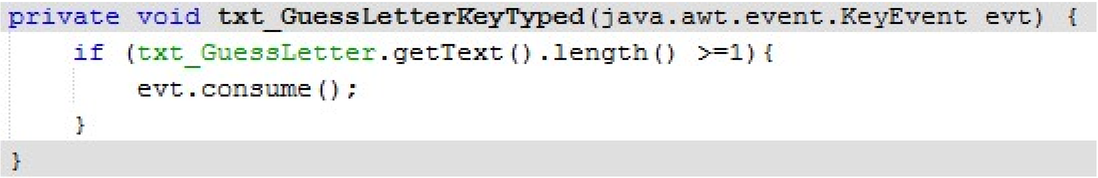
```java
if(correctGuessCount == word.length()){
    JOptionPane.showMessageDialog(rootPane, "Congratzz you have won. Game over.", "Congratulations! :D", JOptionPane.INFORMATION_MESSAGE);
        System.exit(0);
}
}catch(Exception ee){
   JOptionPane.showMessageDialog(rootPane, "Enter a Letter", "ERROR", JOptionPane.ERROR_MESSAGE);
}
```



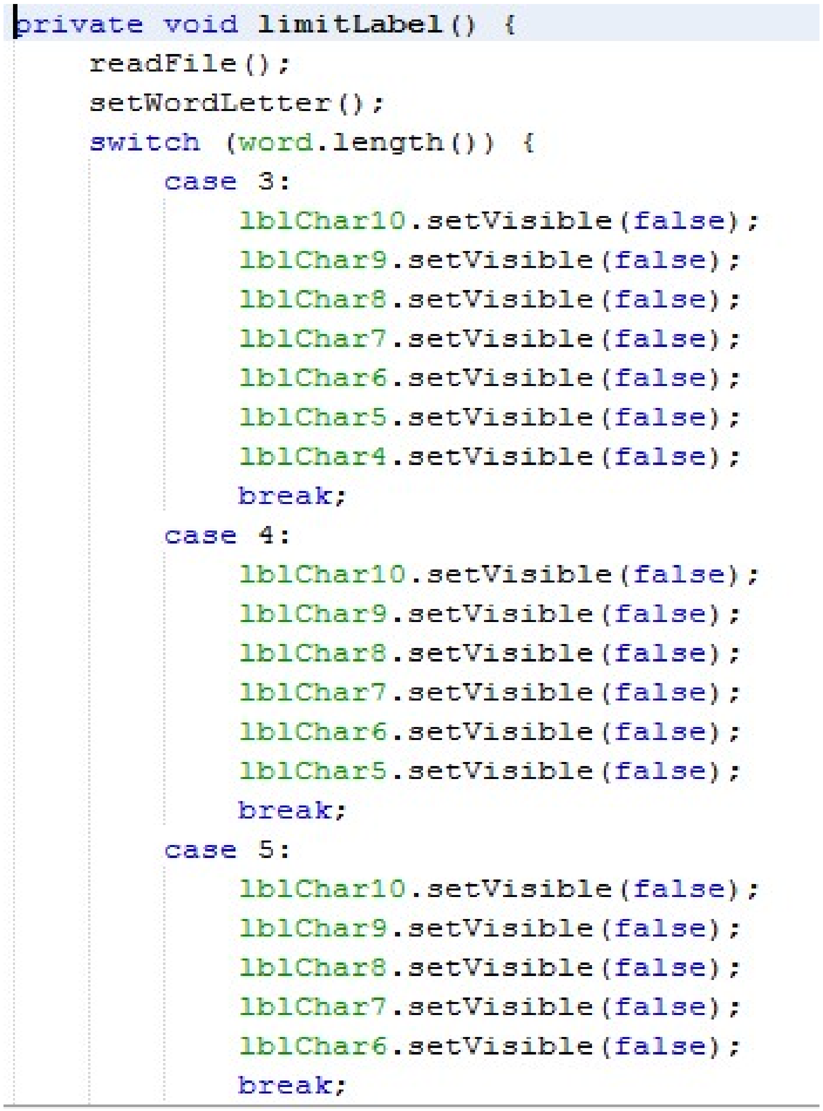
```java
switch (incorrectGuessCount) {
    case 1:
        ImageIcon guessWord1 = new ImageIcon(getClass().getResource("GuessWord2.png"));
        btn_img.setIcon(guessWord1);
        break;
    case 2:
        ImageIcon guessWord2 = new ImageIcon(getClass().getResource("GuessWord3.png"));
        btn_img.setIcon(guessWord2);
        break;
    case 3:
        ImageIcon guessWord3 = new ImageIcon(getClass().getResource("GuessWord4.png"));
        btn_img.setIcon(guessWord3);
        break;
    case 4:
        ImageIcon guessWord4 = new ImageIcon(getClass().getResource("GuessWord5.png"));
        btn_img.setIcon(guessWord4);
        break;
    case 5:
        ImageIcon guessWord5 = new ImageIcon(getClass().getResource("GuessWord6.png"));
        btn_img.setIcon(guessWord5);
        break;
    case 6:
        ImageIcon guessWord6 = new ImageIcon(getClass().getResource("GuessWord7.png"));
        btn_img.setIcon(guessWord6);
        lbl_hint.setText(word);
        JOptionPane.showMessageDialog(rootPane, "You did not win. Game over.", "You Lost!", JOptionPane.INFORMATION_MESSAGE);
        System.exit(0);
    default:
        break;
}
```



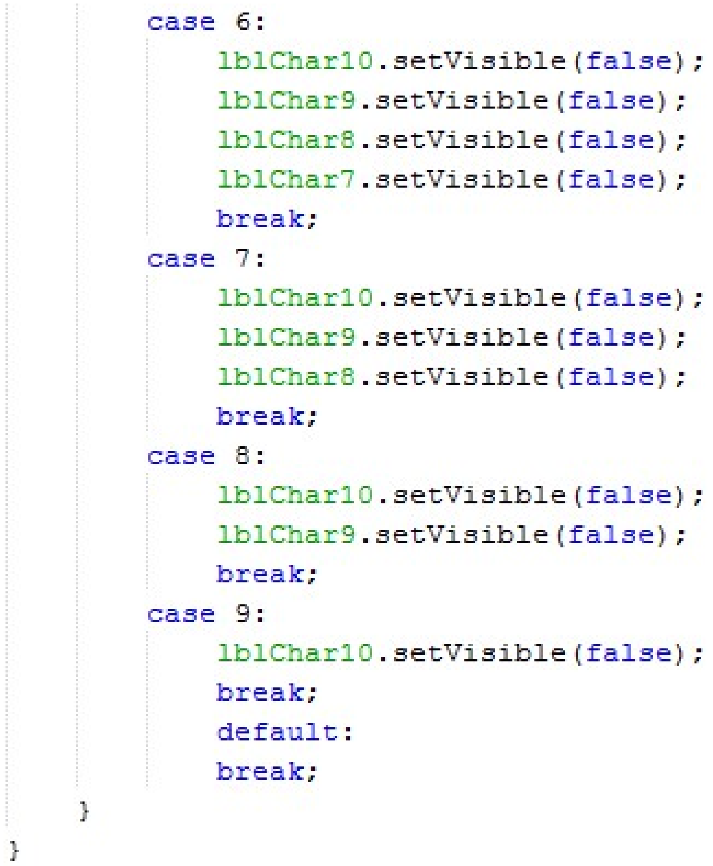
```java
private void btn_quitActionPerformed(java.awt.event.ActionEvent evt) {
    int quit = JOptionPane.showConfirmDialog(null,"Are you sure you want to quit?","Quit game",JOptionPane.YES_NO_OPTION);
        if (quit == JOptionPane.YES_OPTION){
            System.exit(0);
        }
```



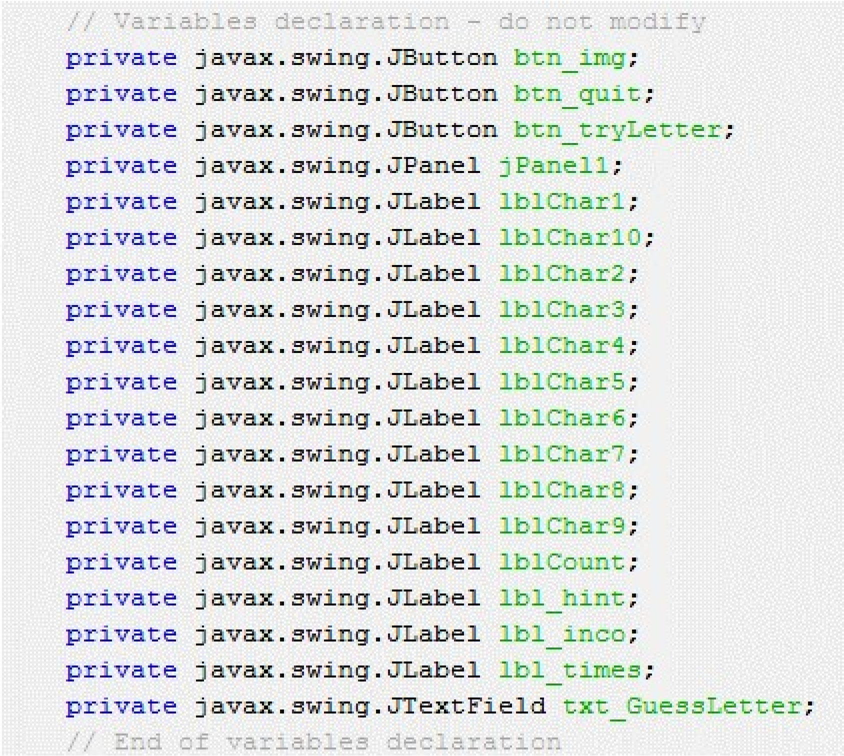
```java
private void txt_GuessLetterKeyTyped(java.awt.event.KeyEvent evt) {
    if (txt_GuessLetter.getText().length() >=1){
        evt.consume();
    }
}
```



```
private void limitLabel() {
    readFile();
    setWordLetter();
    switch (word.length()) {
        case 3:
            lblChar10.setVisible(false);
            lblChar9.setVisible(false);
            lblChar8.setVisible(false);
            lblChar7.setVisible(false);
            lblChar6.setVisible(false);
            lblChar5.setVisible(false);
            lblChar4.setVisible(false);
            break;
        case 4:
            lblChar10.setVisible(false);
            lblChar9.setVisible(false);
            lblChar8.setVisible(false);
            lblChar7.setVisible(false);
            lblChar6.setVisible(false);
            lblChar5.setVisible(false);
            break;
        case 5:
            lblChar10.setVisible(false);
            lblChar9.setVisible(false);
            lblChar8.setVisible(false);
            lblChar7.setVisible(false);
            lblChar6.setVisible(false);
            break;
```

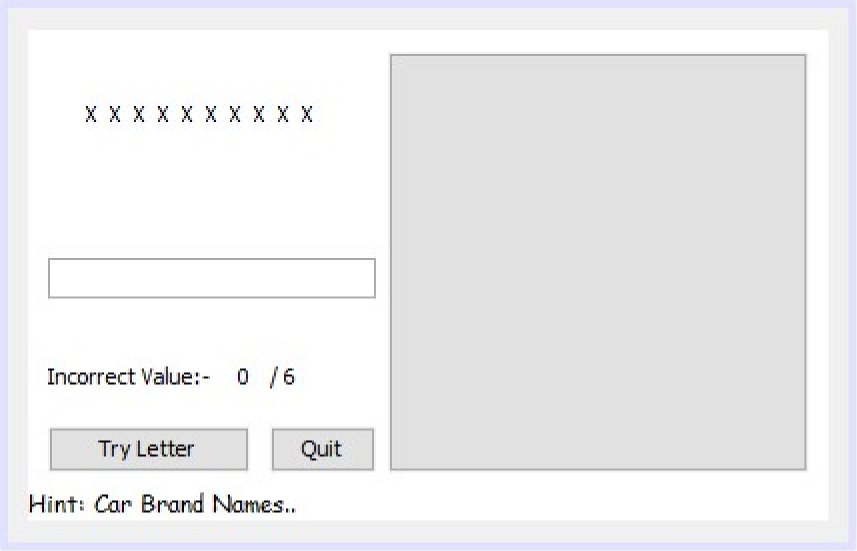


```
        case 6:
            lblChar10.setVisible(false);
            lblChar9.setVisible(false);
            lblChar8.setVisible(false);
            lblChar7.setVisible(false);
            break;
        case 7:
            lblChar10.setVisible(false);
            lblChar9.setVisible(false);
            lblChar8.setVisible(false);
            break;
        case 8:
            lblChar10.setVisible(false);
            lblChar9.setVisible(false);
            break;
        case 9:
            lblChar10.setVisible(false);
            break;
            default:
            break;
    }
}
```

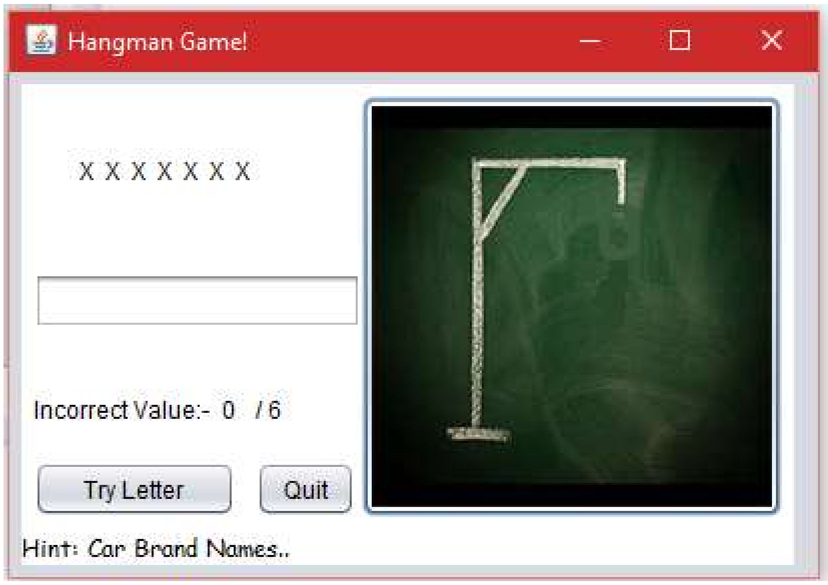


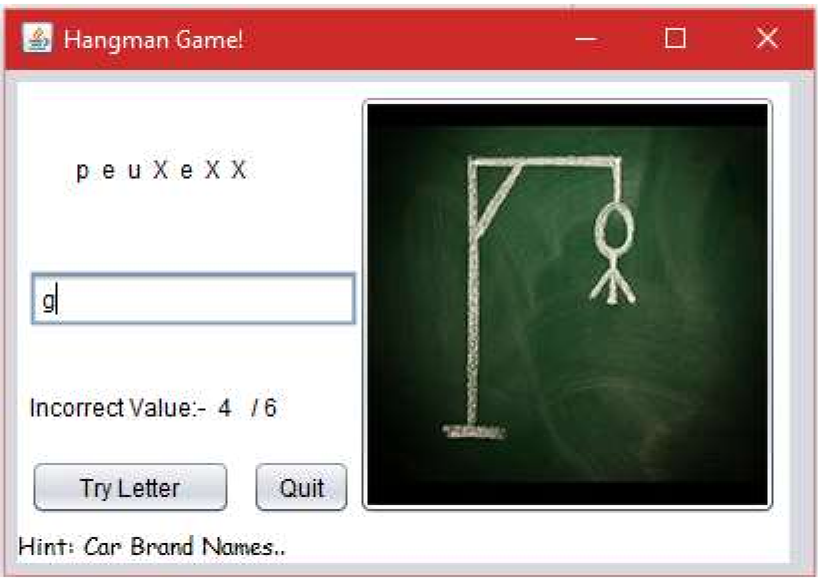
```
    // Variables declaration - do not modify
    private javax.swing.JButton btn_img;
    private javax.swing.JButton btn_quit;
    private javax.swing.JButton btn_tryLetter;
    private javax.swing.JPanel jPanel1;
    private javax.swing.JLabel lblChar1;
    private javax.swing.JLabel lblChar10;
    private javax.swing.JLabel lblChar2;
    private javax.swing.JLabel lblChar3;
    private javax.swing.JLabel lblChar4;
    private javax.swing.JLabel lblChar5;
    private javax.swing.JLabel lblChar6;
    private javax.swing.JLabel lblChar7;
    private javax.swing.JLabel lblChar8;
    private javax.swing.JLabel lblChar9;
    private javax.swing.JLabel lblCount;
    private javax.swing.JLabel lbl_hint;
    private javax.swing.JLabel lbl_inco;
    private javax.swing.JLabel lbl_times;
    private javax.swing.JTextField txt_GuessLetter;
    // End of variables declaration
```

Designing



Testing



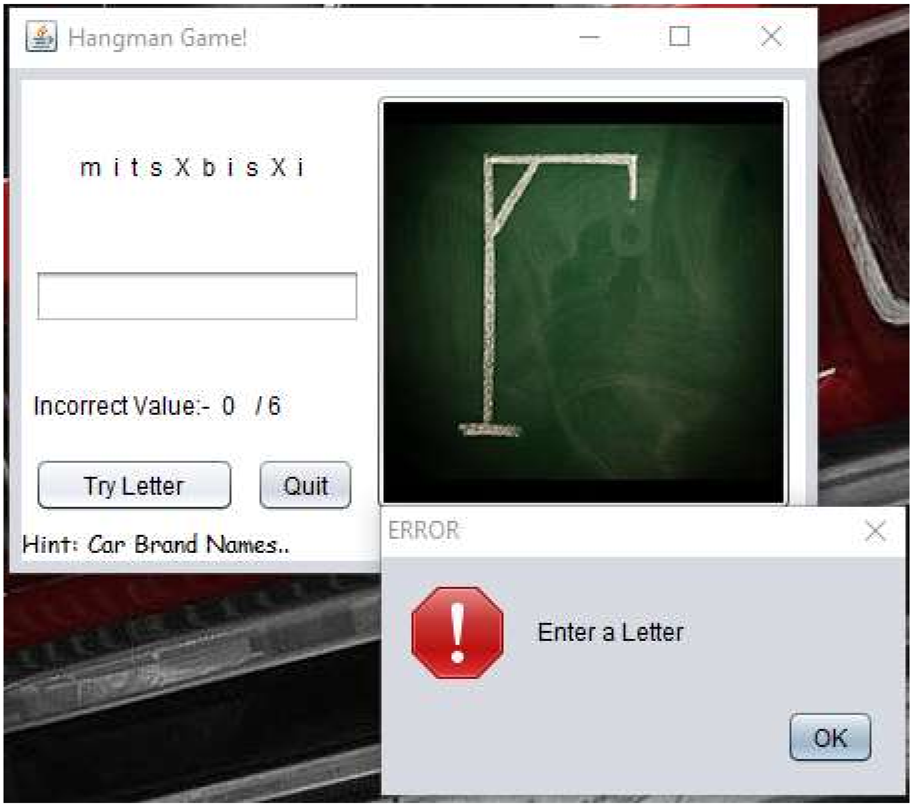


p e u X e X X

g

Incorrect Value:- 4 / 6

Hint: Car Brand Names..

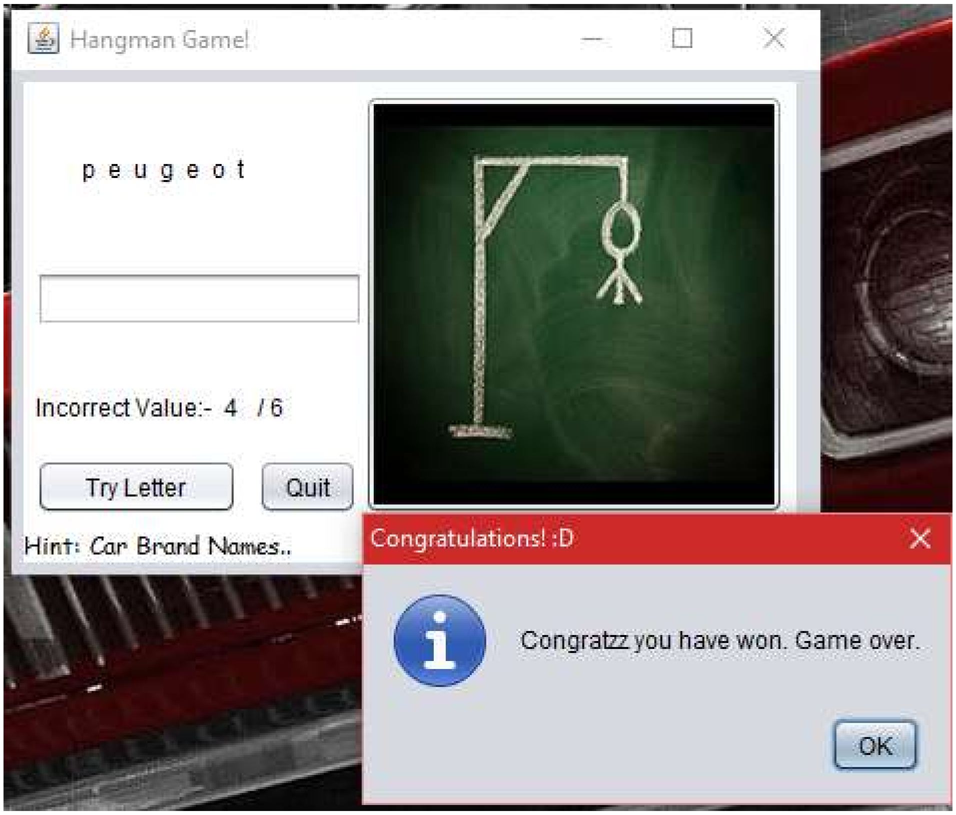


m i t s X b i s X i

Incorrect Value:- 0 / 6

Hint: Car Brand Names..

Enter a Letter



Hangman Game!

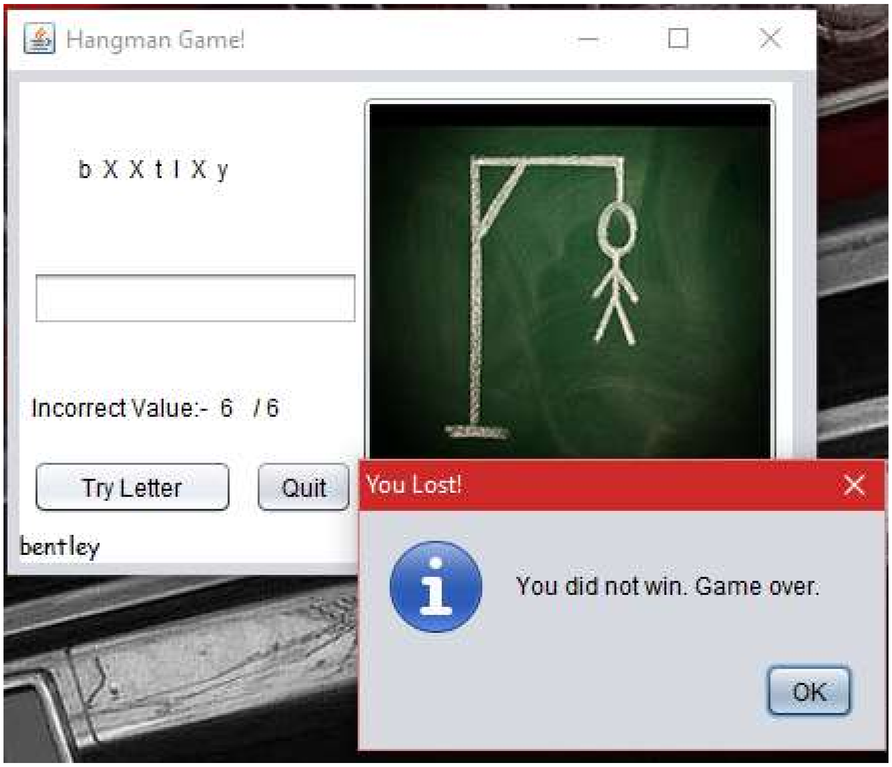
p e u g e o t

Incorrect Value:- 4 / 6

Hint: Car Brand Names..

Congratulations! :D

Congratzz you have won. Game over.



Hangman Game!

b X X t l X y

Incorrect Value:- 6 / 6

bentley

You Lost!

You did not win. Game over.