```java
//Shelley Latreille Hangman Game

/*
This program plays the game Hangman with the user.
Hangman is a game that requires the user to guess the letters of a word
before running out of incorrect guesses. Each incorrect guess will "build"
another part of the Man who is hanging from the gallows.  When the game starts,
the user is presented with an "unoccupied" gallows, all the letters in the
alphabet, and a set of blanks representing the letters in the word. The user
guesses a letter. The user will be allowed 7 incorrect guesses.
The program determines if that letter is in the word and if
it is, then it "uncovers" all the letters in the word. In addition to finding
the letters in the word, it also removes the letter from the alphabet so the
user knows that the letter should not be chosen again. If the user selects a
letter that is not in the word, then a body part will be added to the man.
Incorrect letter guesses will also be removed from the alphabet. If the user
continues to guess incorrectly, the man will continue to be "built" until the
total man appears on the gallows and the user loses the game. The user wins if
all the letters in the word are guessed correctly before the man is completely
built.
 */
package hang.man.shelley.latreille;

import java.util.Random;
import java.util.Scanner;

public class HangManShelleyLatreille
{

    //the user's guesses
    private static char[] wordToGuess;

    //check the length of the random words to be sent to wordToGuess[]
    private static int wordLength;

    //stores the random word temporarily. the user will guess this word
    private static String guessWord;

    private static char[] dash;

    private static final char[] Alphabet =
"abcdefghijklmnopqrstuvwxyz".toCharArray();

    private static char usersGuess;

    private static boolean gameOver = false;

    //words provided. one will be randomly selected for the user to guess
    private static final String[] Words =
        {
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        "macabre", "demise", "gallows", "surreptitious", "lackadaisical"
};

private static String testWord;
private static int count = 0;

public static void main(String[] args)
{
    Scanner input = new Scanner(System.in);
    Random rand = new Random();

    //random nextInt(5). returns a number 0 through 4
    int num = rand.nextInt(5);

    //guessWord is assigned to a random String
    guessWord = Words[num];

    wordLength = guessWord.length();
    dash = new char[wordLength];
    dash = guessWord.toCharArray();

    dashArray(guessWord);

    //informs user what the program does
    System.out.println("Hang Man\n" + "This program will play the "
            + "game of Hangman with you.\n"
            + "You will be asked to guess the letters of a word "
            + "before running out of incorrect guesses. \n"
            + "Each incorrect guess will build another part of the man who "
            + "is hanging from the gallows. \n"
            + "When the game begins, you will see an unoccupied gallows, "
            + "all the letters in the alphabet, \n"
            + "and a set of blanks representing the letters in the word. \n"
            + "You will guess a letter. You will be allowed 7 "
            + "incorrect guesses. \n"
            + "If the letter you guess is in the word, "
            + "then all the letters in the word that match your guess "
            + "will be uncovered. \n"
            + "The letter you guess will also be removed from the alphabet "
            + "that is displayed. \n"
            + "If you select a letter that is not in the word, "
            + "a body part will be added to the man. \n"
            + "If you continue to guess incorrectly, "
            + "the man will continue to be built. \n"
            + "You will win the game if all the letters in the word are "
            + "guessed correctly before the man is completely built. \n");

    while ((7 - count) != 0 && gameOver != true)
    {
        int numberOfGuesses = 0;
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        printGallows();
        System.out.println(" ");
        printAlphabet(dash);

        wordToGuess = explode(guessWord);

        System.out.println("\nPlease input one letter of your choice: ");
        usersGuess = input.nextLine().charAt(0);
        updateAlphabet(usersGuess);
        wordToGuess = guessWord.toCharArray();
        for (int i = 0; i < wordToGuess.length; i++)
        {
            if (wordToGuess[i] == usersGuess)
            {
                dash[i] = usersGuess;
                testWord = new String(dash);

            }
        }
        for (int i = 0; i < guessWord.length(); i++)
        {

            if (usersGuess != wordToGuess[i])
            {

                numberOfGuesses++;
            }
        }
        if (numberOfGuesses == wordLength)
        {

            count++;
        }

        System.out.println("You have " + (7 - count) + " guesses left!");

        endGame();
    }

    System.out.println((gameOver != true) ? "\n\nI am sorry, you lost "
            + "the game!" : "\n\nCongratulations! You won the "
            + "game! " + guessWord + " is the correct word!");
    if (count == 7)
    {
        System.out.println("\n-------");
        System.out.println("|      |\t\t");
        System.out.println("|      O");
        System.out.println("|     /|\\");
        System.out.println("|      |");
        System.out.println("|     / \\");
```

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            System.out.println("\n\nYour word was: " + guessWord);
        }

    }

    //grabs a String. uses the method toCharArray(); to convert to a char[]
    public static char[] explode(String s)
    {

        wordToGuess = s.toCharArray();
        return wordToGuess;
    }

    //grabs a character array. prints each character with a space
    public static void printAlphabet(char[] c)
    {

        for (int i = 0; i < c.length; i++)
        {

            System.out.print(c[i] + " ");

        }
        System.out.println(" ");

    }

    public static char[] dashArray(String s1)
    {
        dash = new char[wordLength];
        for (int i = 0; i < dash.length; i++)
        {
            dash[i] = '_';

        }
        return dash;
    }

    // letters in the alphabet will be removed and replaced with a dash
    public static char[] updateAlphabet(char guess)
    {
        for (int i = 0; i < Alphabet.length; i++)
        {
            if (Alphabet[i] == (guess))
            {
                Alphabet[i] = '_';

            }
            System.out.print("" + Alphabet[i] + " ");
        }
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        System.out.println("");

        return Alphabet;
    }
// prints the gallows
// if the user's input is incorrect it will display the man

    public static void printGallows()
    {

        System.out.println("\n-------");
        System.out.println("|      |\t\t");

        if (count == 1)
        {
            System.out.println("|     O");
        }

        if (count == 2)
        {
            System.out.println("|     O");
            System.out.println("|     |");
        }
        if (count == 3)
        {
            System.out.println("|     O");
            System.out.println("|    /|");
        }
        if (count == 4)
        {
            System.out.println("|     O");
            System.out.println("|    /|\\");
        }
        if (count == 5)
        {
            System.out.println("|     O");
            System.out.println("|    /|\\");
            System.out.println("|     |");
        }
        if (count == 6)
        {
            System.out.println("|     O");
            System.out.println("|    /|\\");
            System.out.println("|     |");
            System.out.println("|    /");
        }

        System.out.println("|");
        System.out.println("|");
        System.out.println("|");
```

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        printAlphabet(Alphabet);

    }

    public static boolean endGame()
    {

        if (guessWord.equals(testWord))
        {
            gameOver = true;
            return gameOver;
        }
        return gameOver;
    }

}
```