

Swing

1-) Design and code a Swing GUI to translate text that is input in English into Pig Latin. You can assume that the sentence contains no punctuation. The rules for Pig Latin are as follows:

- For words that begin with consonants, move the leading consonant to the end of the word and add “ay.” Thus, “ball” becomes “allbay”; “button” becomes “uttonbay”; and so forth.
- For words that begin with vowels, add “way” to the end of the word. Thus, “all” becomes “allway”; “one” becomes “oneway”; and so forth.

2-) Develop a simple number game using swing that will display nine buttons displayed in a 3: 3 game board.

Nine random numbers will be generated, one corresponding to each button.

The numbers can be anything in the range of 1 to 50.

The buttons will be initially blank, and the player will be asked to select any three buttons.

As soon as the player selects a button, the corresponding number should be displayed at the bottom of the frame, finally displaying all three numbers selected by the player.

If one of the numbers selected is odd, the player gets a prize of \$20;

if two are odd, the player gets a prize of \$50; and

if all three numbers are odd, the player gets a prize of \$100. Also,

if any of the three selected numbers is 50, then there will be a bumper prize of \$1000.

If any even number is selected, then the system should output “Better Luck Next Time!”

3-) Design and code a Swing GUI calculator.

Your calculator will have two text fields that the user cannot change:

One labeled "Result" will contain the result of performing the operation, and the other labeled "Operand" will be for the user to enter a number to be added, subtracted, and so forth from the result.

The user enters the number for the "Operand" text field by clicking buttons labeled with the digits 0 through 9 and a decimal point, just as in a real calculator.

Allow the operations of addition, subtraction, multiplication, and division.

When the user clicks a button for an operation, the following occurs:

the operation is performed, the "Result" text field is updated, and the "Operand" text field is cleared.

Include a button labeled "Reset" that resets the "Result" to 0.0. Also include a button labeled "Clear" that resets the "Operand" text field so it is blank.