(a) Pot Luck

Design and implement a GUI application that presents a game based on a 5 by 5 matrix of buttons. One of the buttons (selected at random) "hides" the prize, while two of the buttons (selected at random, should be different than each other and prize button) hide bombs. A status bar at the top of the window shows the number of guesses. When the prize button is pressed, the status bar shows "You got it in x attempts!". When one of the bomb buttons is pressed, the status bar shows "Sorry! You are blown up at attempt x!".

(b) Convert Numbers

Design and implement a GUI application that converts decimal, hex and binary numbers, as shown in the figure below. When you enter a decimal value in the decimal-value text field and press the *Enter* key, its corresponding hex and binary numbers are displayed in the other two text fields. Similarly, you can enter values in the other fields and convert them accordingly.

