CSE 1007
JAVA LAB -10
-Aishwarya S 19BCE1709

IDE USED : ECLIPSE

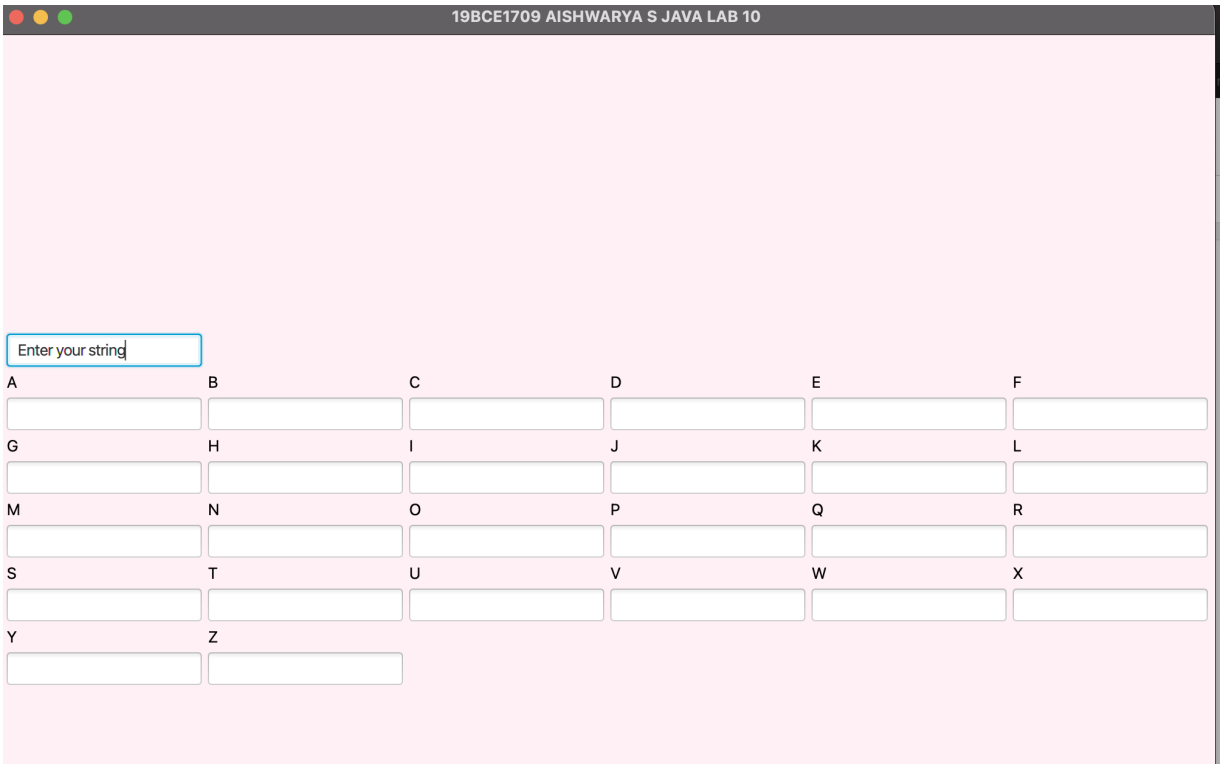
CODE:

```
package jlabs;
import javafx.application.Application;
import javafx.event.EventHandler;
import javafx.geometry.Insets;
import javafx.geometry.Pos;
import javafx.scene.Scene;
import javafx.scene.control.TextField;
import javafx.scene.input.KeyCode;
import javafx.scene.input.KeyEvent;
import javafx.scene.layout.Background;
import javafx.scene.layout.BackgroundFill;
import javafx.scene.layout.CornerRadii;
import javafx.scene.layout.GridPane;
import javafx.scene.text.Text;
import javafx.stage.Stage;
import javafx.scene.paint.Color;

public class javalab10 extends Application {
   public static void main(String[] args) {
      launch(args);
   }

   @Override
   public void start(Stage stage) {


     String str[]= new String[26];
     TextField[] txtf = new TextField[26];

     for(int i=65;i<=90;i++)
     { str[i-65]=Character.toString((char)i);}




      GridPane gridPane = new GridPane();
      TextField tf = new TextField();
      tf.setText("Enter your string");
     //alternate method
      /*tf.setOnKeyPressed(new EventHandler<KeyEvent>() {
         @Override
         public void handle(KeyEvent ke) {
            if (ke.getCode().equals(KeyCode.ENTER)) {
```

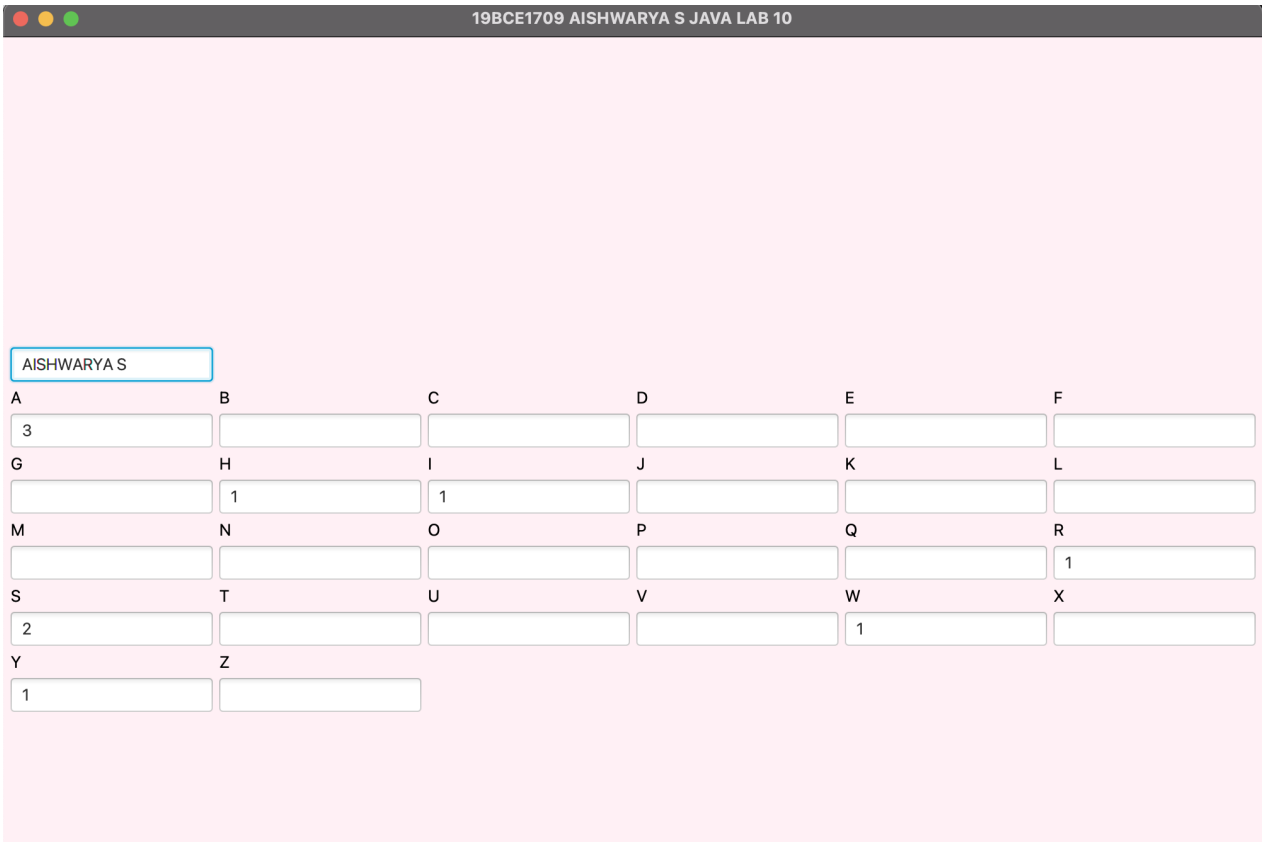
```
                int[] arr= new int[26];
                System.out.print(tf.getText());

                char[] chars = tf.getText().replaceAll("[^a-zA-Z0-9]", "").toUpperCase().toCharArray();

                for(char ch: chars)
                {   System.out.print((int)ch);
                   arr[(int)ch-65]++;
                   txtf[(int)ch-65].setText(Integer.toString(arr[(int)ch-65]));

                }




            }
        }
    });*/
//EVENT LISTENER

    tf.textProperty().addListener((observable, oldValue, newValue) -> {
        int[] arr= new int[26];



        char[] chars = newValue.replaceAll("[^a-zA-Z]", "").toUpperCase().toCharArray();

        if(chars.length==0)
        {
                for(int i=0;i<26;i++)
                   txtf[i].setText("");



        }
        else
        {
        for(char ch: chars)
        {
           arr[(int)ch-65]++;

           txtf[(int)ch-65].setText(Integer.toString(arr[(int)ch-65]));

        }
        }



    });

    //Setting size for the pane

    gridPane.setMinSize(1000, 1000);

   gridPane.setVgap(5);
   gridPane.setHgap(5);
```

```
        //Setting the Grid alignment
        gridPane.setAlignment(Pos.CENTER);
        //gridPane.add(new Text("tt"), 0, 0);
        tf.setPrefWidth(100);

        gridPane.add(tf, 0, 1);
         int r=2,c=0,pos=0;

        for(String s:str)
        {  txtf[pos]= new TextField();

              gridPane.add(new Text(s), c%6, r);
              txtf[pos].setEditable(false);
              gridPane.add(txtf[pos],c%6, r+1);
              pos++;
           c=c+1;
           r=(c/6)*2+2;



        }

        Scene scene = new Scene(gridPane);
        BackgroundFill background_fill = new BackgroundFill(Color.LAVENDERBLUSH,
              CornerRadii.EMPTY, Insets.EMPTY);
        Background background = new Background(background_fill);
        gridPane.setBackground(background);


        stage.setTitle("19BCE1709 AISHWARYA S JAVA LAB 10");


        stage.setScene(scene);


        stage.show();
    }
}
```

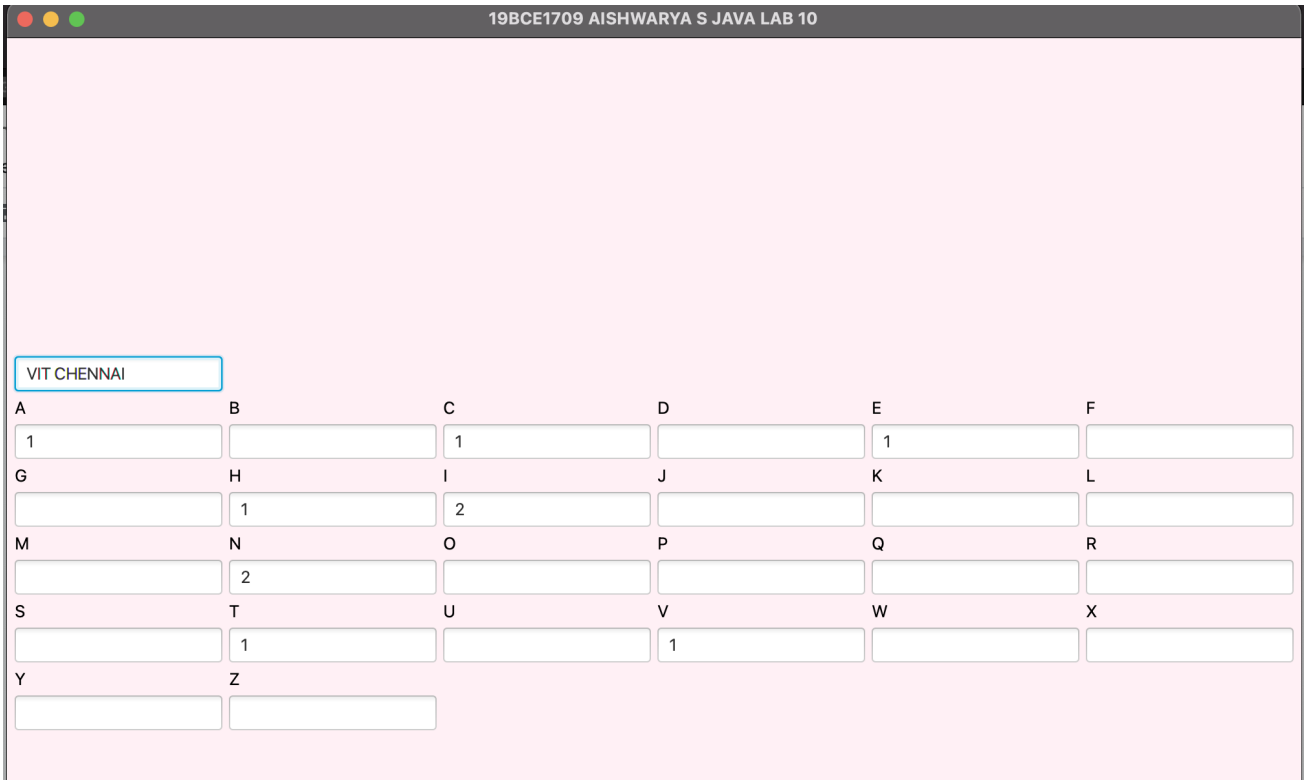
OUTPUT SCREENSHOTS:



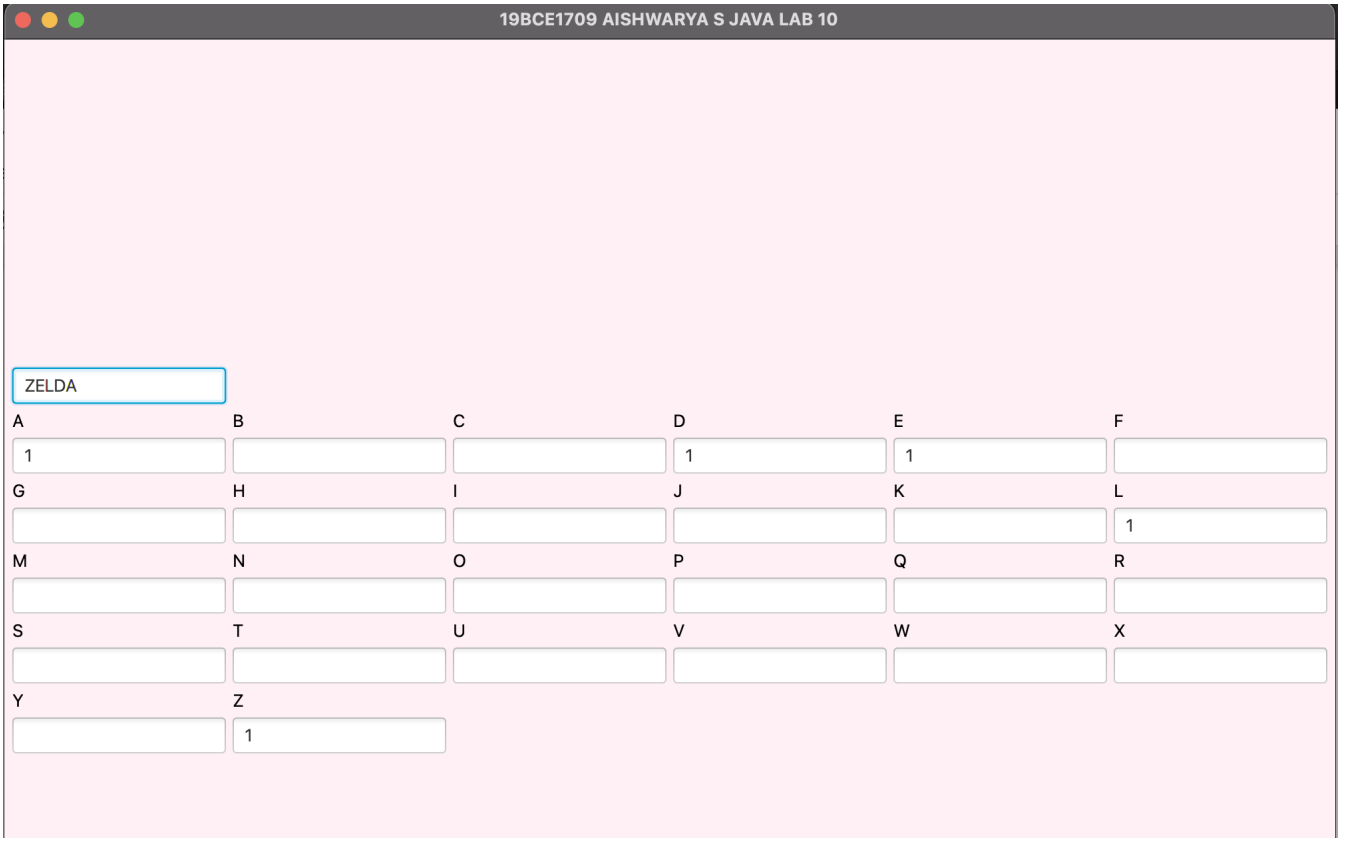
TEST CASE 1:



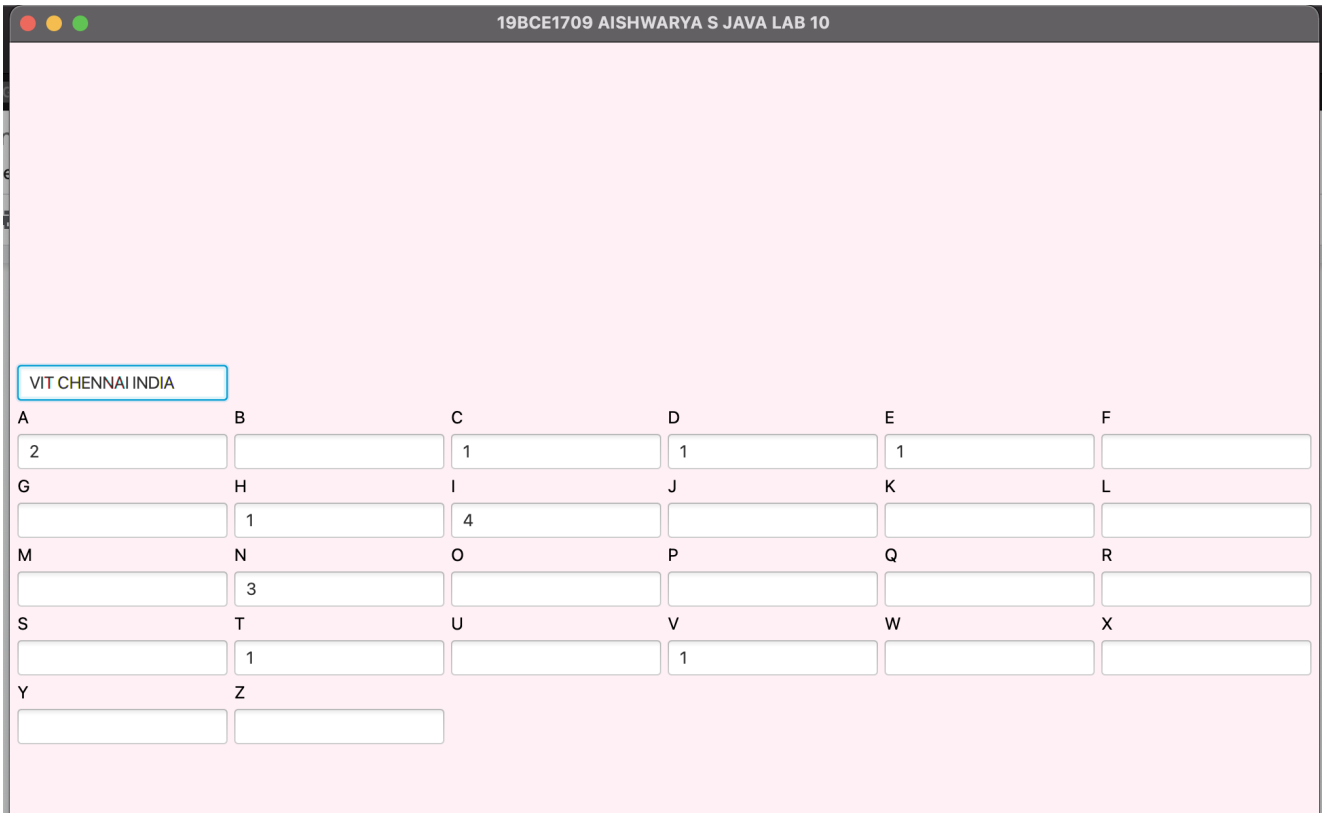
TEST CASE 2:



TEST CASE 3:



TEST CASE 4:



TEST CASE 5: