

Task A:

- Startup

The screenshot shows the 'Metric Conversion Assistant' window. It has a blue title bar and a light gray background. The window is divided into two columns of input fields. The left column contains 'Mile:', 'Pound:', 'Gallon:', and 'Fahrenheit:'. The right column contains 'Kilometer:', 'Kilogram:', 'Liters:', and 'Centigrade:'. Each label is followed by a text input field. The 'Mile' field contains '0.00', 'Pound' contains '0.00', 'Gallon' contains '0.00', 'Fahrenheit' contains '0.00', 'Kilometer' contains '0.0', 'Kilogram' contains '0.0', 'Liters' contains '0.0', and 'Centigrade' contains '-17.77777777777778'. A 'Convert' button is located at the bottom center of the window.

- Constant Declaration

```
private final double MILE_TO_KILOMETER = 1.609344; 2 usages
private final double POUND_TO_KILOGRAM = 0.453592; 2 usages
private final double GALLON_TO_LITER = 3.78541; 2 usages
private final double FAHRENHEIT_TO_CENTIGRADE = 32; 2 usages
```

- Conversion Value

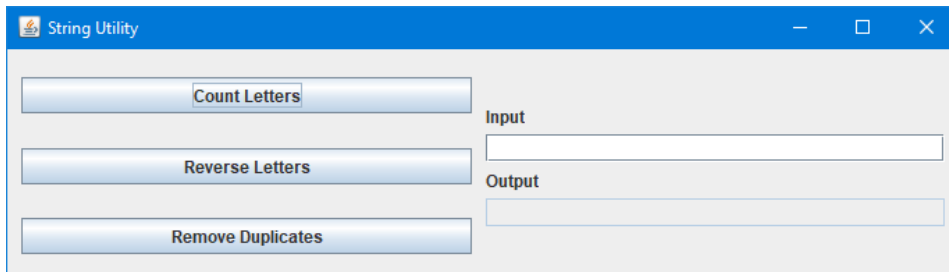
The screenshot shows the 'Metric Conversion Assistant' window with the same layout as the startup screen. The input fields now contain the following values: 'Mile' is '12.00', 'Pound' is '14.00', 'Gallon' is '58.00', 'Fahrenheit' is '32.00', 'Kilometer' is '19.312128', 'Kilogram' is '6.350288', 'Liters' is '219.553780000000002', and 'Centigrade' is '0.0'. The 'Convert' button is still at the bottom center.

- Exception Handler

The screenshot shows the 'Metric Conversion Assistant' window with the same layout. The 'Mile' input field contains the text 'A0.00'. A dialog box is open in the center of the window. The dialog box has a title bar that says 'NumberFormatException' and a close button (X). The main text of the dialog box says 'java.lang.NumberFormatException: For input string: "A0.00"'. There is a red 'X' icon to the left of the text. At the bottom of the dialog box is an 'OK' button. The 'Convert' button is visible at the bottom of the main window.

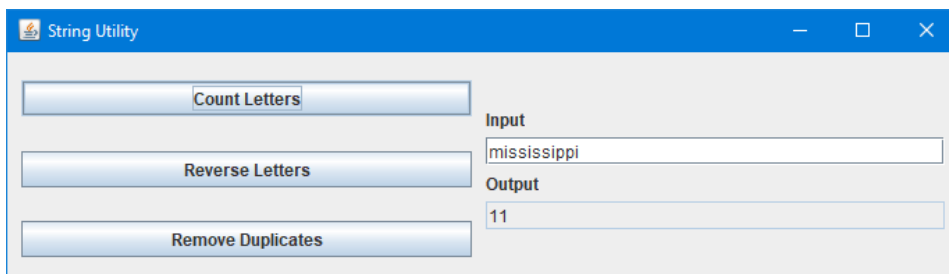
Tack B:

- Startup



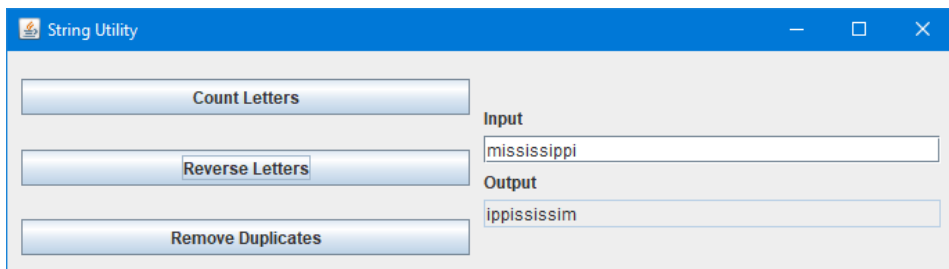
The screenshot shows the 'String Utility' application window. On the left, there are three buttons: 'Count Letters', 'Reverse Letters', and 'Remove Duplicates'. On the right, there are two text input fields labeled 'Input' and 'Output'. Both fields are currently empty.

- Count Letters



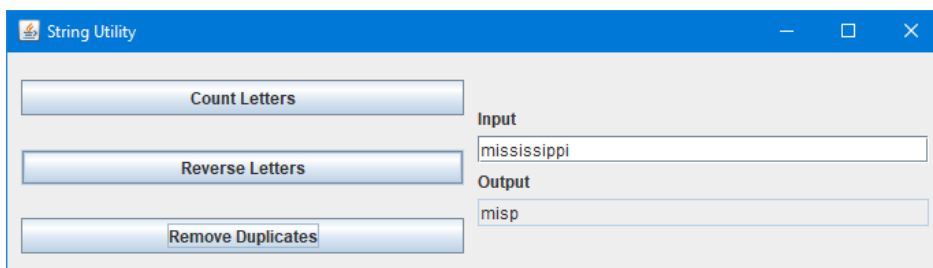
The screenshot shows the 'String Utility' application window. The 'Count Letters' button is selected. The 'Input' field contains the text 'mississippi'. The 'Output' field contains the number '11'.

- Reverse Letters



The screenshot shows the 'String Utility' application window. The 'Reverse Letters' button is selected. The 'Input' field contains the text 'mississippi'. The 'Output' field contains the text 'ippississim'.

- Remove Duplicates



The screenshot shows the 'String Utility' application window. The 'Remove Duplicates' button is selected. The 'Input' field contains the text 'mississippi'. The 'Output' field contains the text 'misp'.