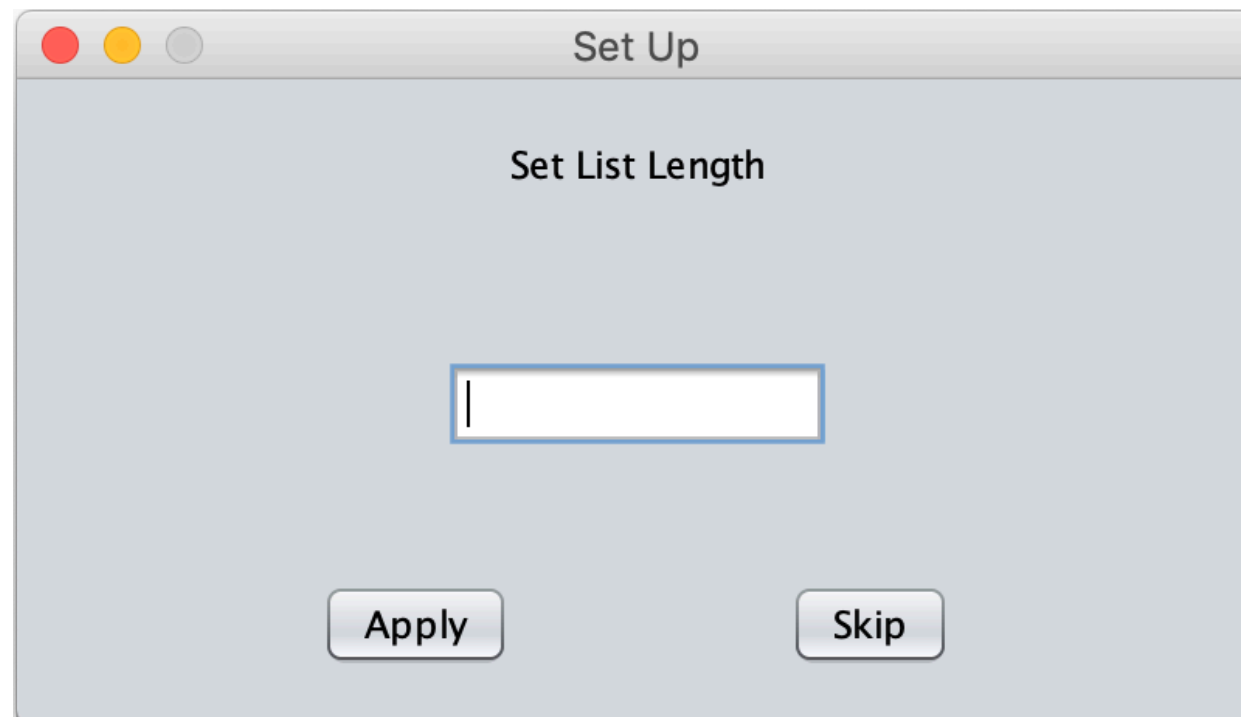


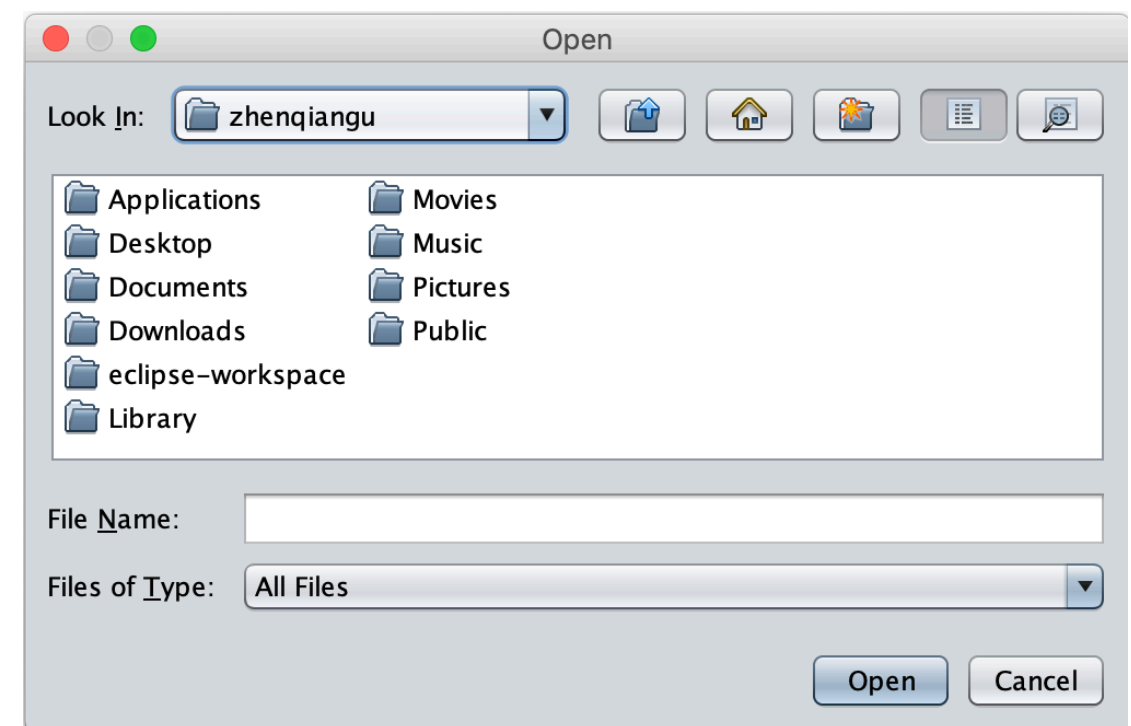
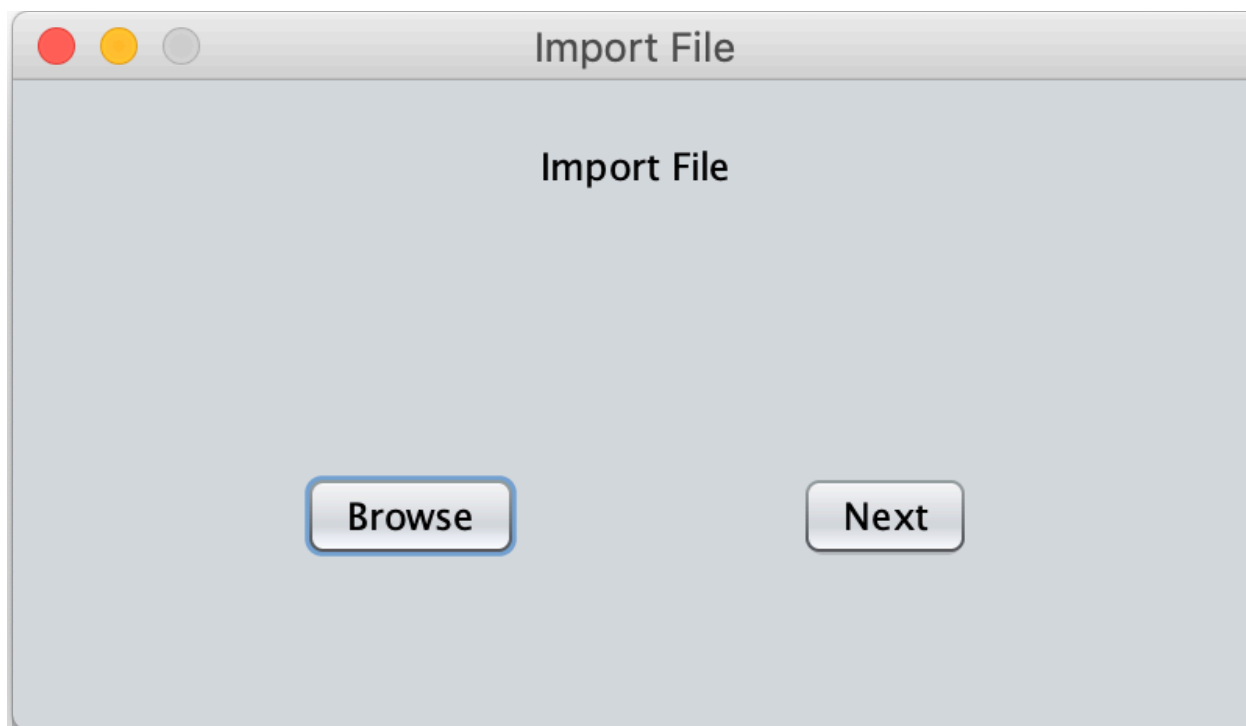
Visual Presentation Screen Shots

First, enter the length of the array, if nothing is entered, click Apply, an array with length of 30 will be instantiated. If click skip, also an array with length of 30 will be instantiated. If enter a number and then click Apply, the length of the array will be the number entered.

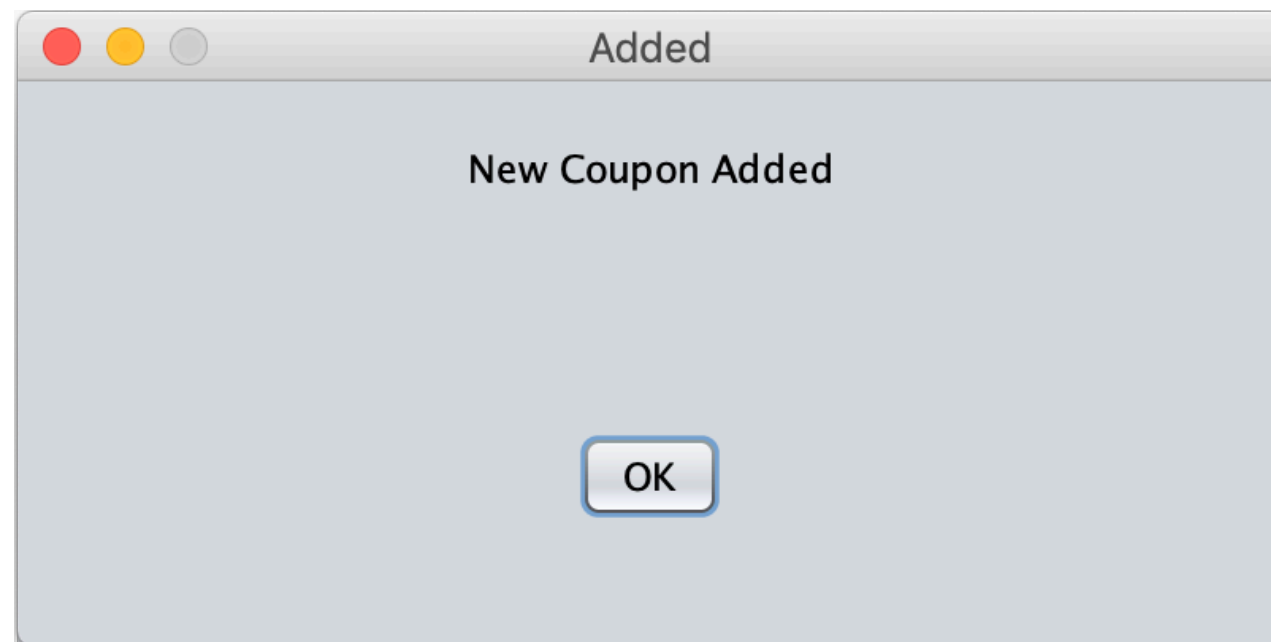


The image shows a standard macOS-style dialog box titled "Set Up". Inside the dialog, the text "Set List Length" is centered. Below this text is a rectangular text input field with a blue border and a vertical cursor on the left. At the bottom of the dialog, there are two buttons: "Apply" on the left and "Skip" on the right. The dialog has a light gray background and a title bar with three colored window control buttons (red, yellow, and gray) on the top left.

Next, the program asks the user to import a .txt file.



After imported the file, it shows a message.



Then go to the next window, here we can add new coupon manually.

Coupon

Provider	Product Name	Price	Discount Rate	Expiration	Unused
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Add Coupon

Search Coupon

Sort By

☐ Privoder

☐ Product Name

☐ Price

☐ Rate

☐ Expiration

☐ Status

☐ Final Price

Show All Coupon

If successfully added, a message will pop out.

Coupon

Provider	Product Name	Price	Discount Rate	Expiration	Unused
newProvider	newProduct	50	30	200	true

Add Coupon

Search Coupon

Sort By

☐ Privoder

☐ Product Name

☐ Status

☐ Final Price

Show All Coupon

Added

New Coupon Added

OK

If the provider is longer than 20 bytes, the user will know.

The image shows a web application interface for managing coupons. A modal dialog box titled "Provider is Too Long" is displayed in the foreground, containing the message "Provider should be less than 20 bytes." and an "OK" button. The background interface, titled "Coupon", includes a table with columns: Price, Discount Rate, Expiration, and Unused. The table contains one row with values: (empty), 30, 200, and true. Below the table are buttons for "Add Coupon" and "Search Coupon". At the bottom, there is a "Sort By" section with checkboxes for "Privoder", "Product Name", "Price", "Rate", "Expiration", "Status", and "Final Price". A "Show All Coupon" button is located at the very bottom.

Price	Discount Rate	Expiration	Unused
	30	200	true

Sort By

☐ Privoder ☐ Product Name ☐ Price ☐ Rate ☐ Expiration ☐ Status ☐ Final Price

Show All Coupon

If the product name is longer than 20 characters, the user will know.

The image shows a web application interface for managing coupons. A modal dialog box is open in the foreground, displaying an error message: "Product Name is Too Long" and "Product Name should be less than 20 characters." with an "OK" button. The background interface includes a "Coupon" header, a table with columns "Price", "Discount Rate", "Expiration", and "Unused", and a "Sort By" section with checkboxes for "Privoder", "Product Name", "Price", "Rate", "Expiration", "Status", and "Final Price". Buttons for "Add Coupon", "Search Coupon", and "Show All Coupon" are also visible.

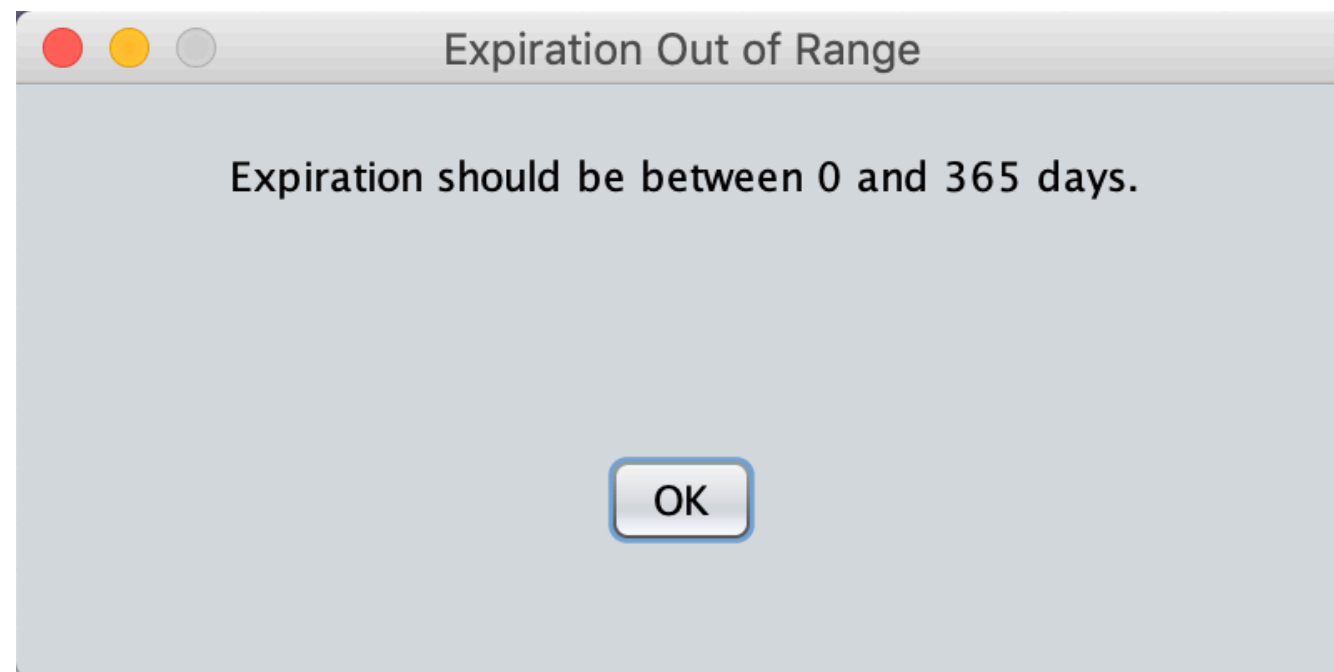
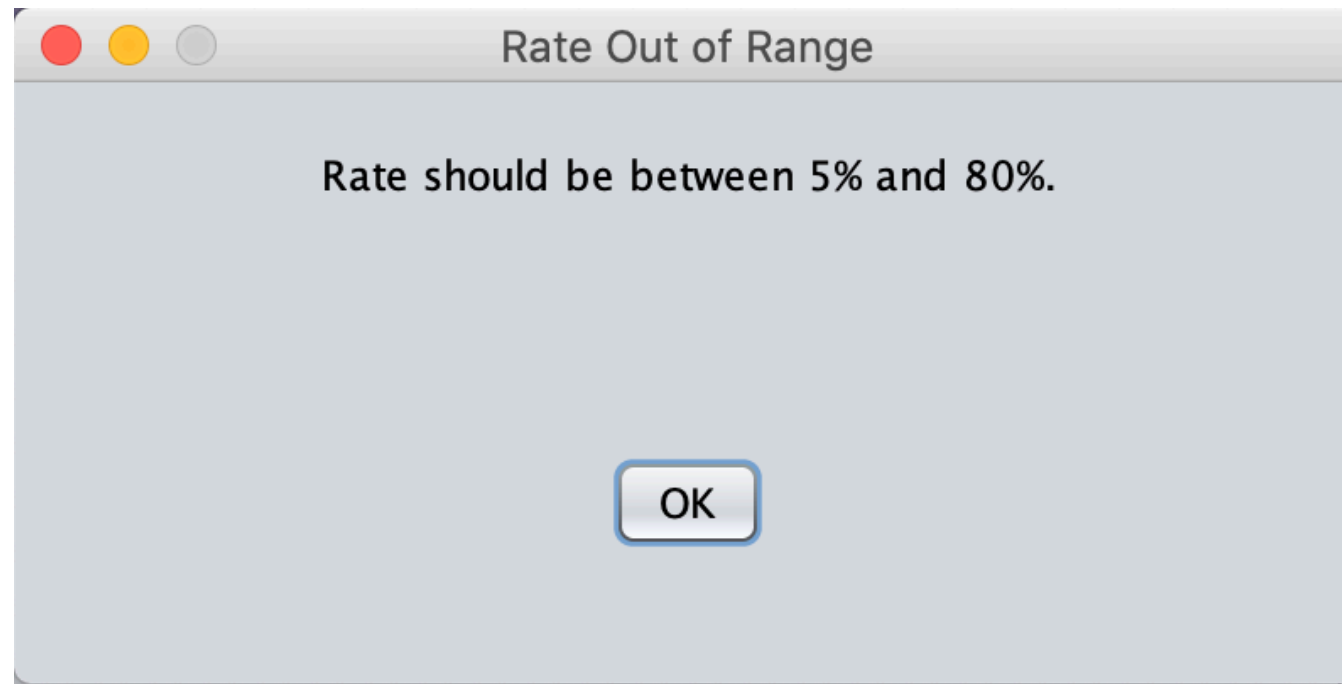
Price	Discount Rate	Expiration	Unused
	30	200	true

Sort By

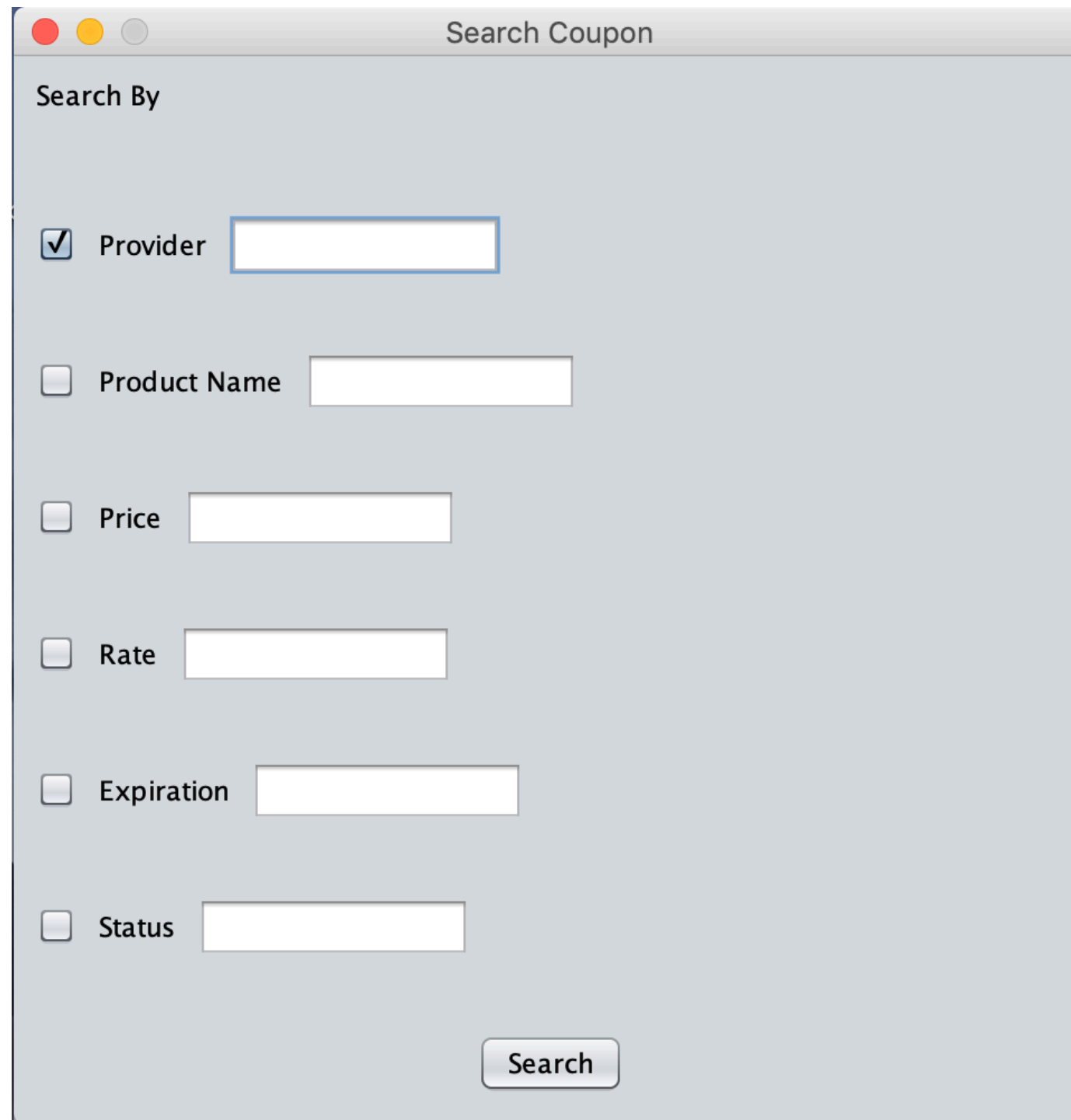
☐ Privoder ☐ Product Name ☐ Price ☐ Rate ☐ Expiration ☐ Status ☐ Final Price

Buttons: Add Coupon, Search Coupon, Show All Coupon

Similar if the rate and expiration is out of range.



Then we goto the search function



A screenshot of a 'Search Coupon' window. The window has a title bar with three colored buttons (red, yellow, grey) and the text 'Search Coupon'. Below the title bar, the text 'Search By' is displayed. There are six search criteria, each with a checkbox and a text input field: 'Provider' (checked), 'Product Name', 'Price', 'Rate', 'Expiration', and 'Status'. A 'Search' button is located at the bottom right of the window.

Search Coupon

Search By

☒ Provider

☐ Product Name

☐ Price

☐ Rate

☐ Expiration

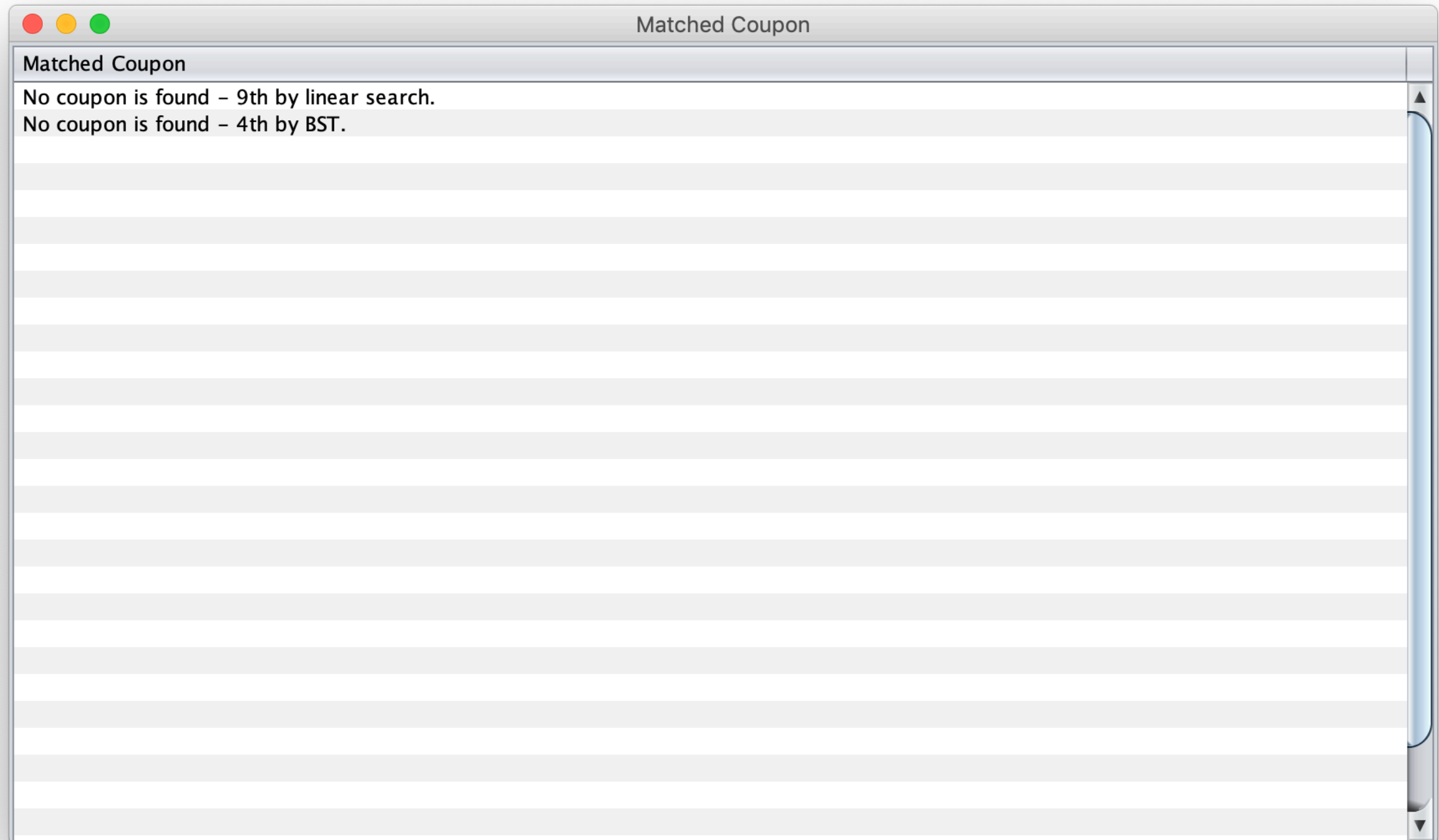
☐ Status

Search

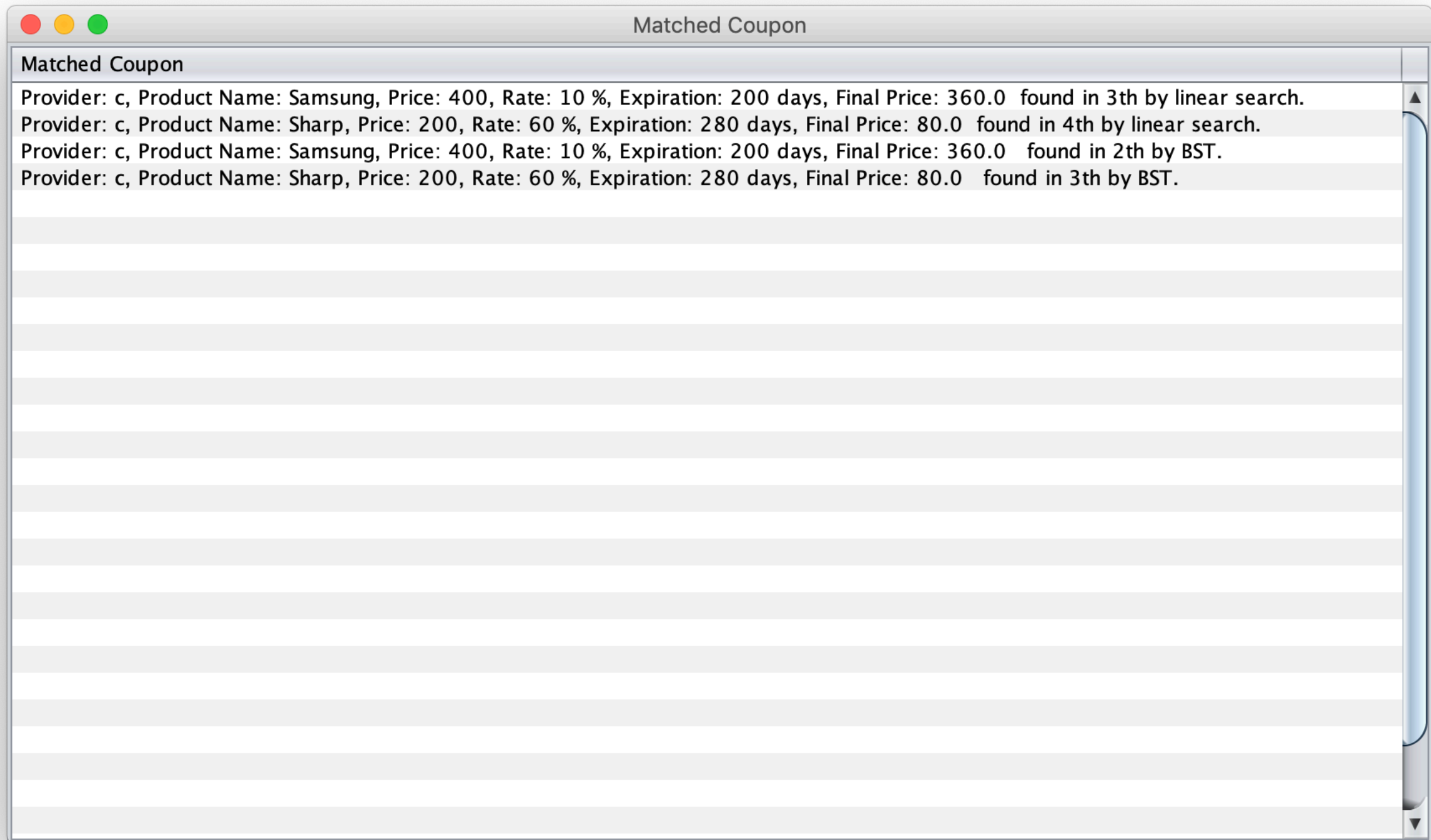
If matched, a table will show the result

[illegible]

If no coupon matched, the table will also show the result



The search function supports multi-targets.



Then we go back to the coupon window, and click the “show all button”

Coupon

Provider	Product Name	Price	Discount Rate	Expiration	Unused
<input type="text" value="newProvider"/>	<input type="text" value="newProduct"/>	<input type="text" value="50"/>	<input type="text" value="30"/>	<input type="text" value="500"/>	<input type="text" value="true"/>

Add Coupon

Search Coupon

Sort By

☐ Privoder

☐ Product Name

☐ Price

☐ Rate

☐ Expiration

☐ Status

☐ Final Price

Show All Coupon

It will show all the coupons in its original sequence

[illegible]

Then close the table, choose one attribute to sort the coupon array. This time we chose the price. The array will be sorted by price. We can also change to another attributes.

[illegible]