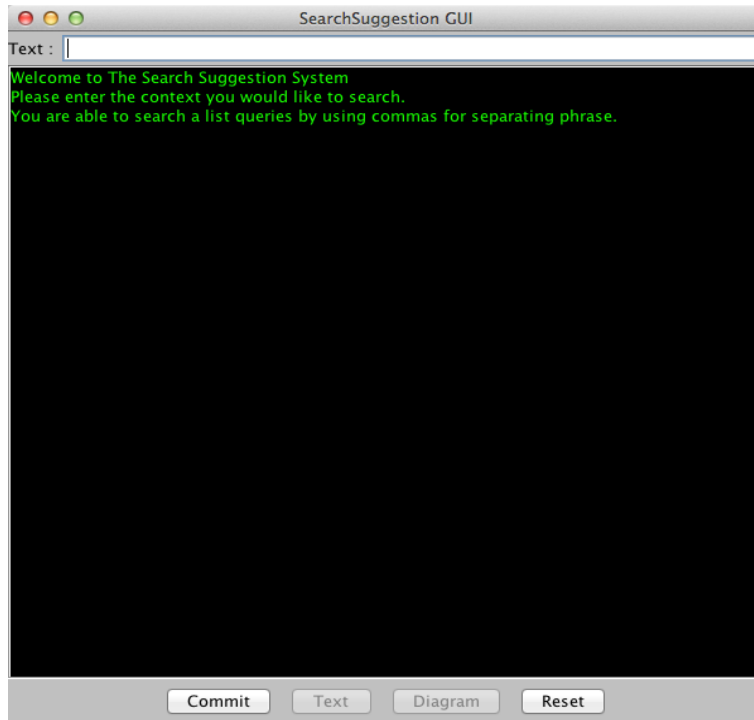


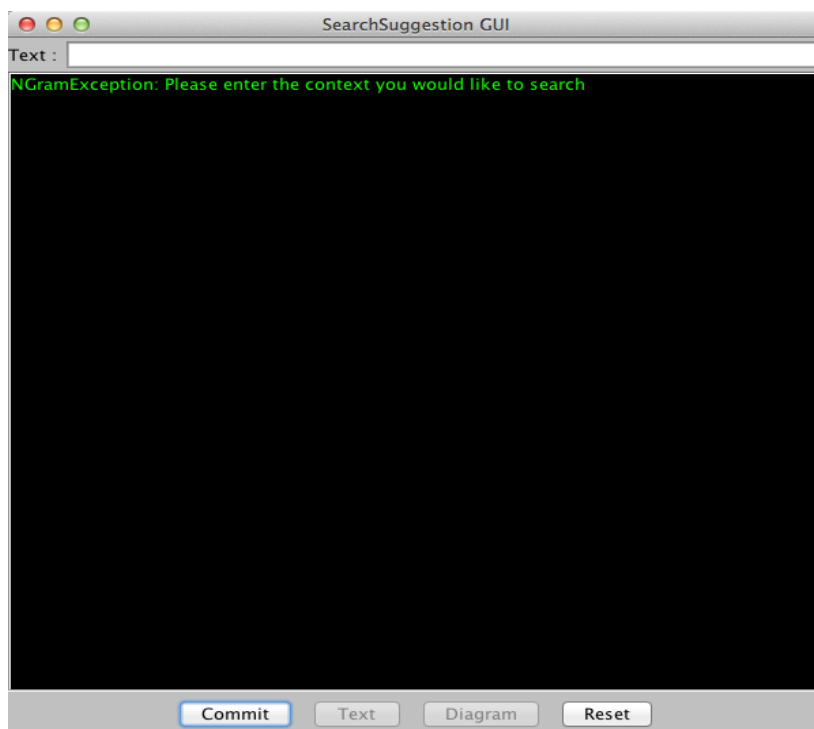
The scenario of GUI test

Script 1: Perform commitment when no string is inputted:

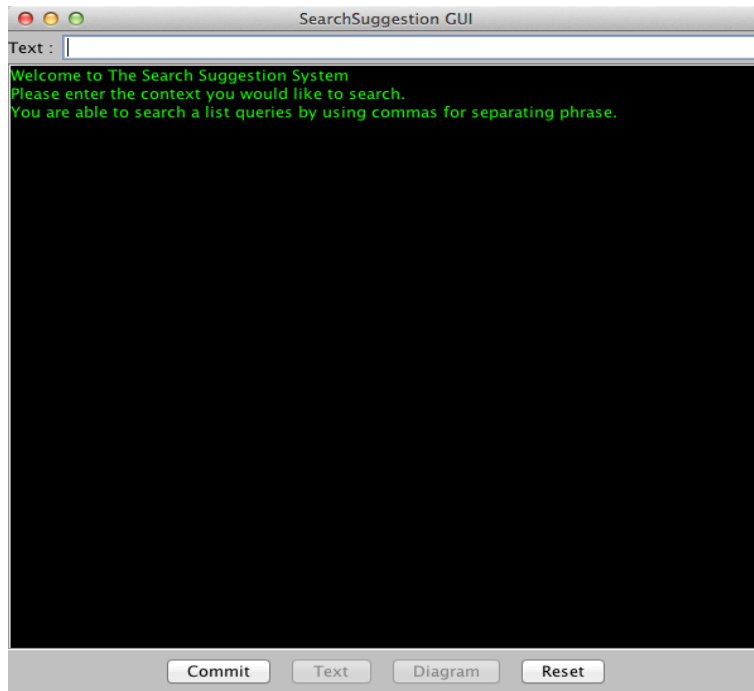
[Initial state: Display screen blank; Textual display unavailable; Diagram display unavailable;
Text input area is waiting for inputting]



1. PAG to click the commit button.
2. Display screen prompts an exception, "NGramException: Please enter the context you would like to search", and the text and diagram button still unavailable.



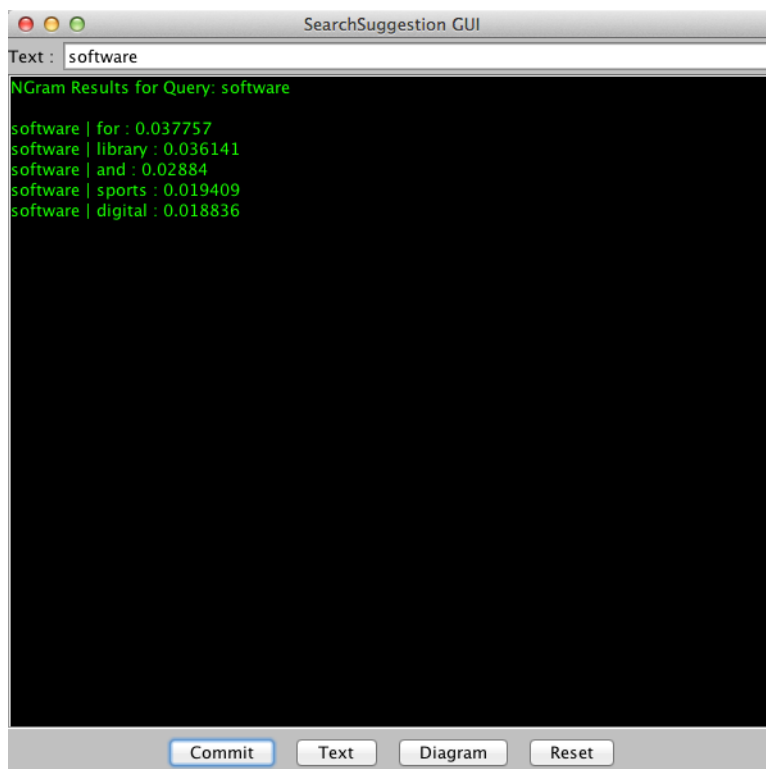
3. PAG to click the reset button.
4. The display screen returns blank, and the text input area is waiting for inputting, and the application returns to initial status.



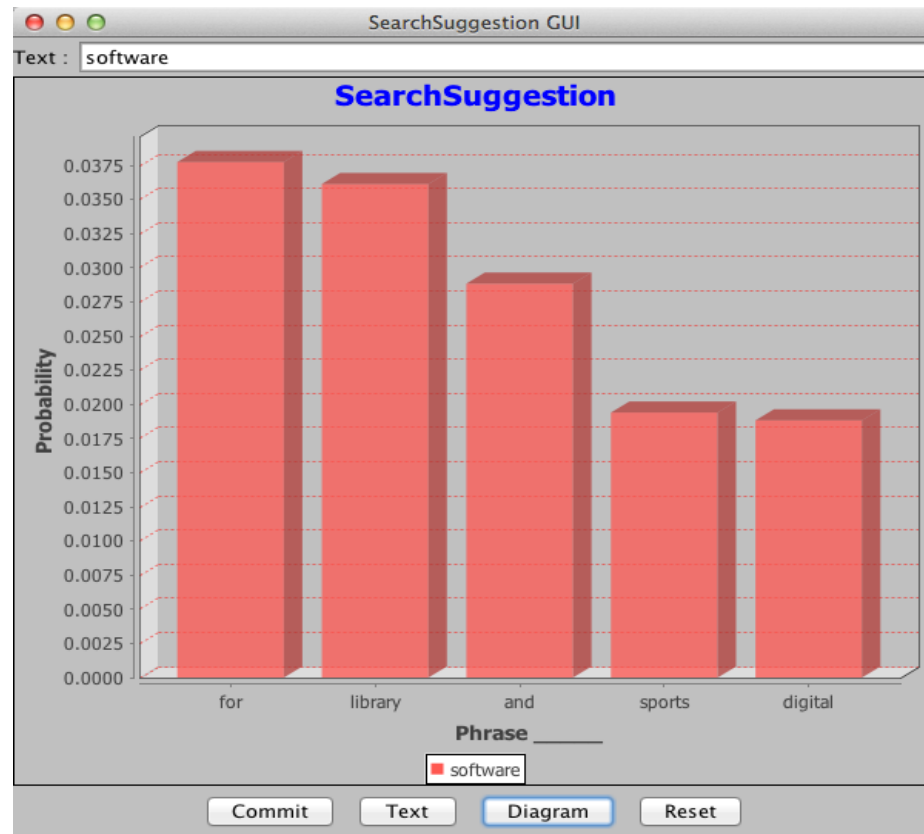
Script 2: Perform commitment when inputting one normal word

[Initial state: Display screen blank; Textual display unavailable; Diagram display unavailable; Text input area is waiting for inputting]

1. PAG to input an English word: software, and click commit button;
2. The display screen shows the domains and its possibilities of the word.



3. PAG to click the Text Button.
4. The content of display screen and the status of the application don't change.
5. PAG to click the Diagram Button.
6. The result of domains and possibilities of the word will print as bar chart on the display screen.

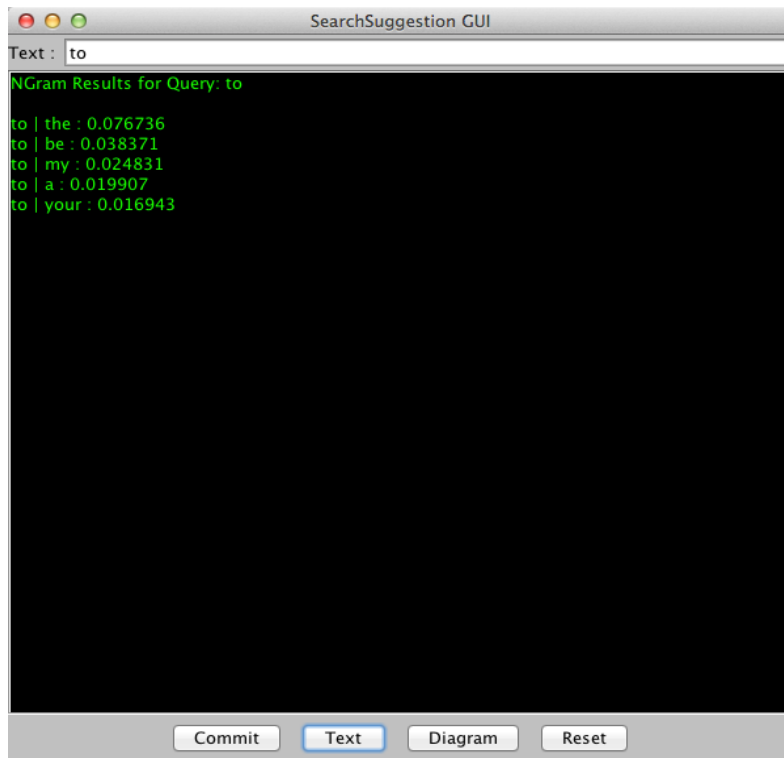


7. PAG to click the Reset Button.
8. The application returns to the initial status.

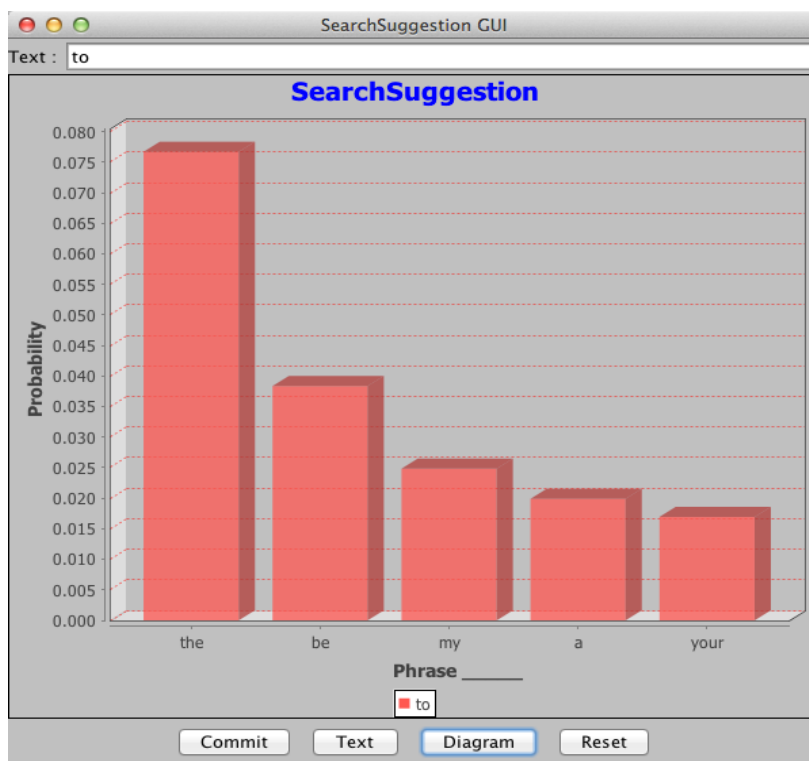
Script 3: Perform commitment when inputting one legal but frequently searched word

[Initial state: Display screen blank; Textual display unavailable; Diagram display unavailable; Text input area is waiting for inputting]

1. PAG to input an English word: to, and click commit button;
2. The application has no response for about 2 minutes, but the results are printed finally.



3. PAG to click the Text Button.
4. The content of display screen and the status of the application don't change.
5. PAG to click the Diagram Button.
6. The result of domains and possibilities of the word will print as bar chart on the display screen.



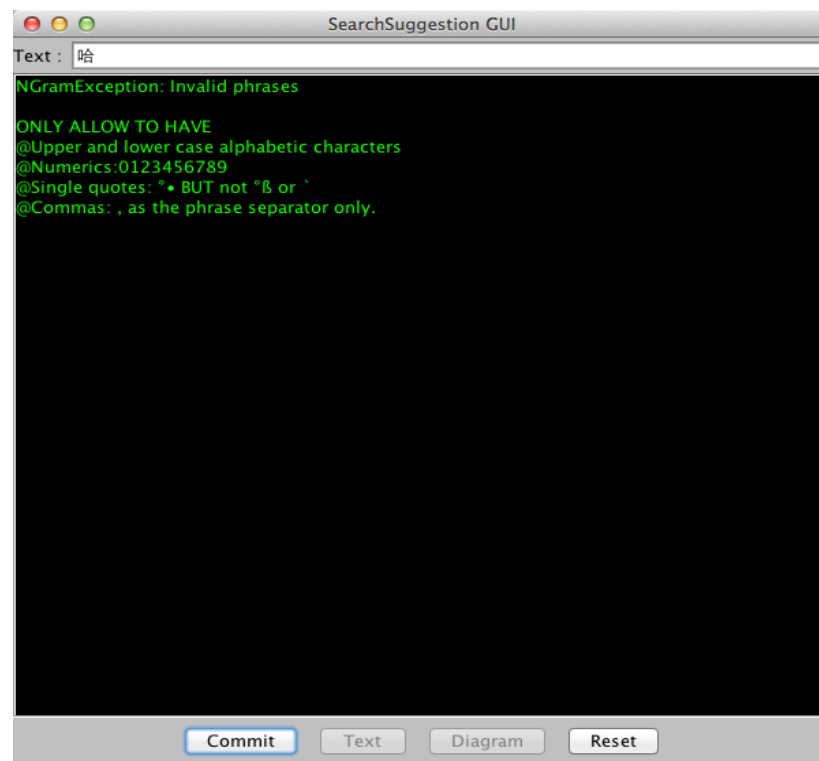
7. PAG to click the Reset Button.

8. The application returns to the initial status.

Script 4: Perform commitment when inputting one illegal word.

[Initial state: Display screen blank; Textual display unavailable; Diagram display unavailable; Text input area is waiting for inputting]

1. PAG to enter a Chinese word: 哈, and click commit button.
2. Display screen prompts an exception, saying that the word inputted is not legal and give some instructions of input, here the text and diagram button still unavailable.

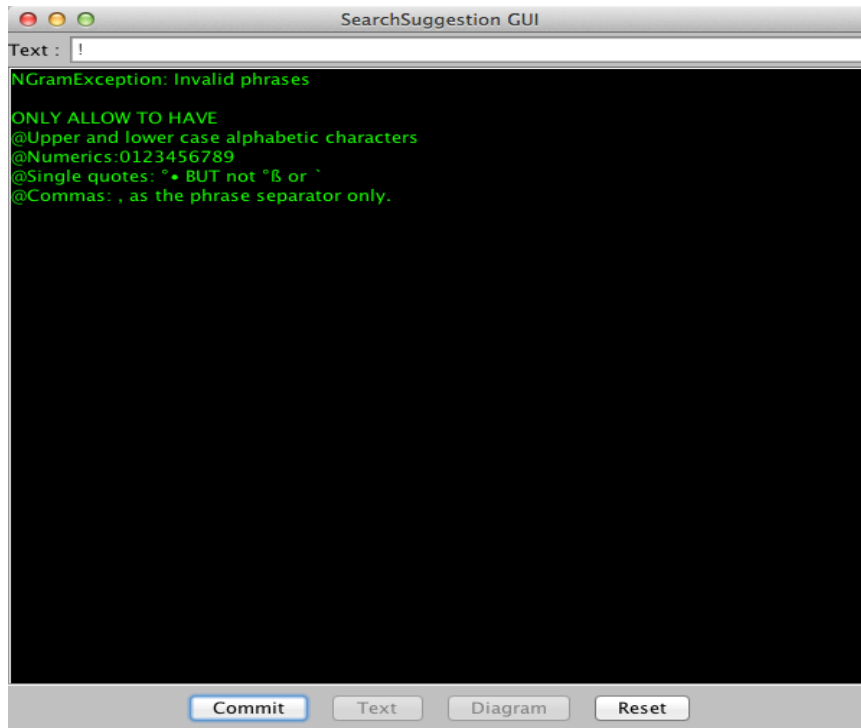


3. PAG to click the reset button.
4. The display screen returns blank, and the text input area is waiting for inputting, and the application returns to initial status.

Script 5: Perform commitment when inputting single punctuation.

[Initial state: Display screen blank; Textual display unavailable; Diagram display unavailable; Text input area is waiting for inputting]

1. PAG to enter a punctuation: "!", and click commit button.
2. Display screen prompts an exception, saying that the phrase inputted is not valid and give some instructions of input, here the text and diagram button still unavailable.

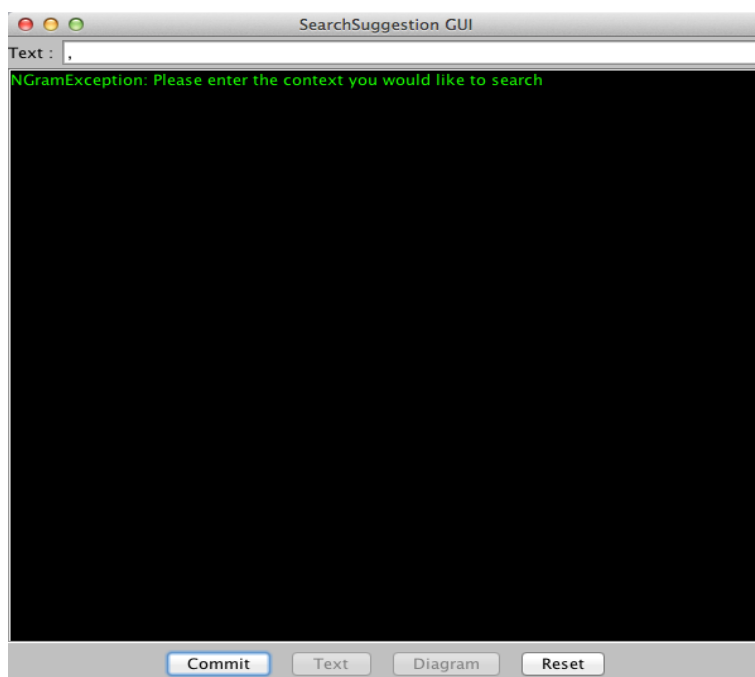


3. PAG to click the reset button.
4. The display screen returns blank, and the text input area is waiting for inputting, and the application returns to initial status.

Script 6: Perform commitment when inputting single comma.

[Initial state: Display screen blank; Textual display unavailable; Diagram display unavailable; Text input area is waiting for inputting]

1. PAG to enter a punctuation: ",", and click commit button.
2. Display screen prompts an exception, saying that the phrase inputted is not valid and give some instructions of input, here the text and diagram button still unavailable.

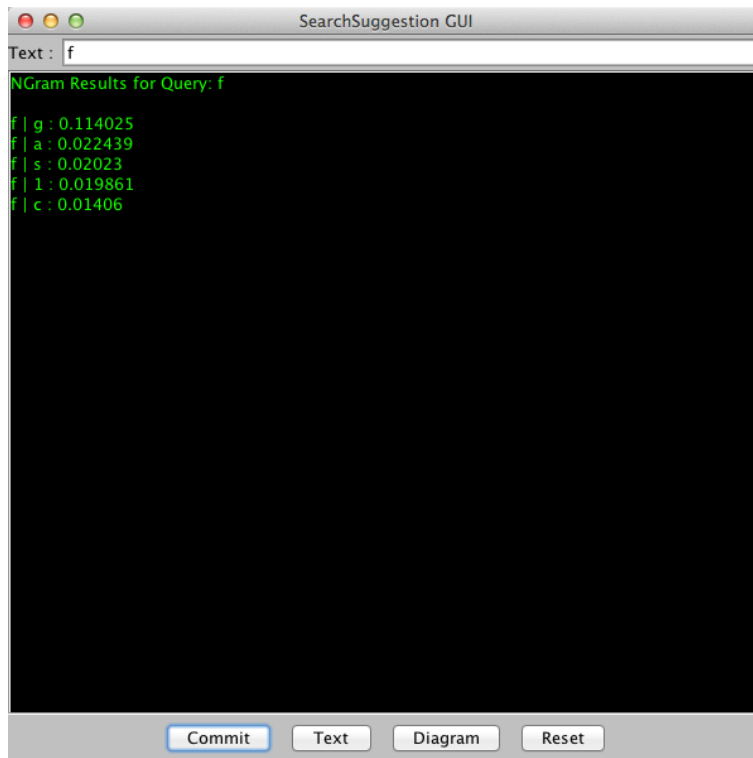


3. PAG to click the reset button.
4. The display screen returns blank, and the text input area is waiting for inputting, and the application returns to initial status.

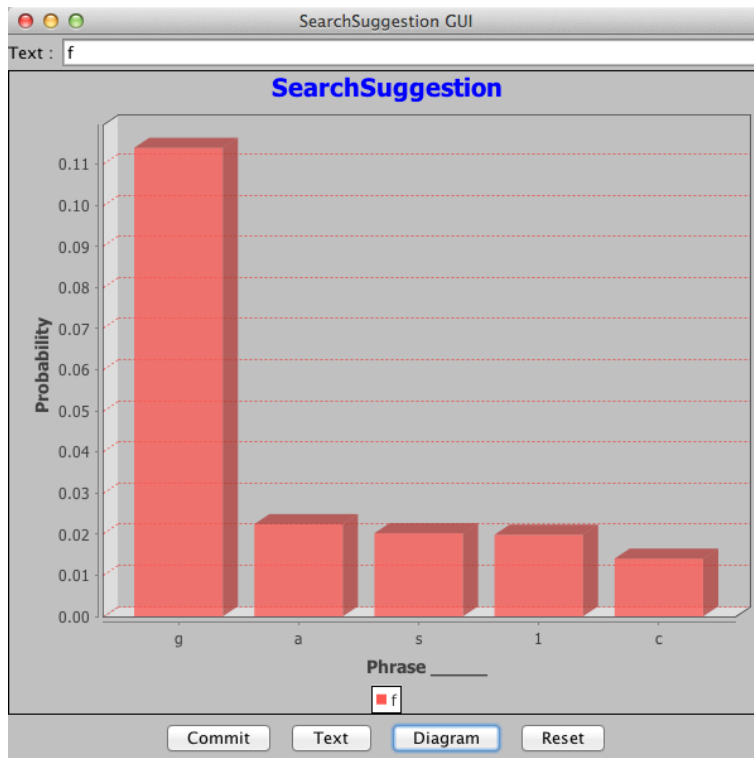
Script 7: Perform commitment when inputting single character.

[Initial state: Display screen blank; Textual display unavailable; Diagram display unavailable; Text input area is waiting for inputting]

1. PAG to enter a character such as "f", and click commit button.
2. The display screen shows the domains and its possibilities of the character.



3. PAG to click the Text Button.
4. The content of display screen and the status of the application don't change.
5. PAG to click the Diagram Button.
6. The result of domains and possibilities of the character will print as bar chart on the display screen.

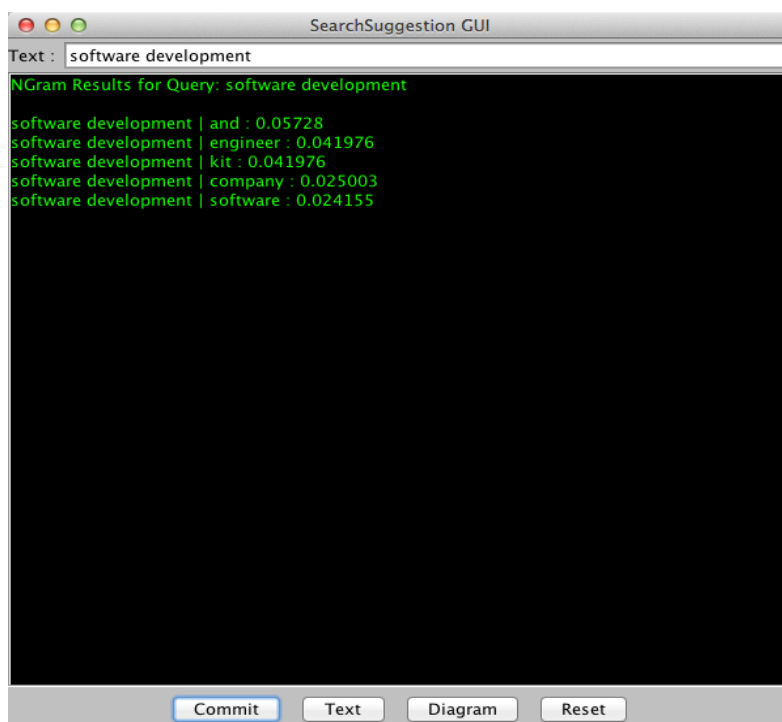


7. PAG to click the Reset Button.
8. The application returns to the initial status.

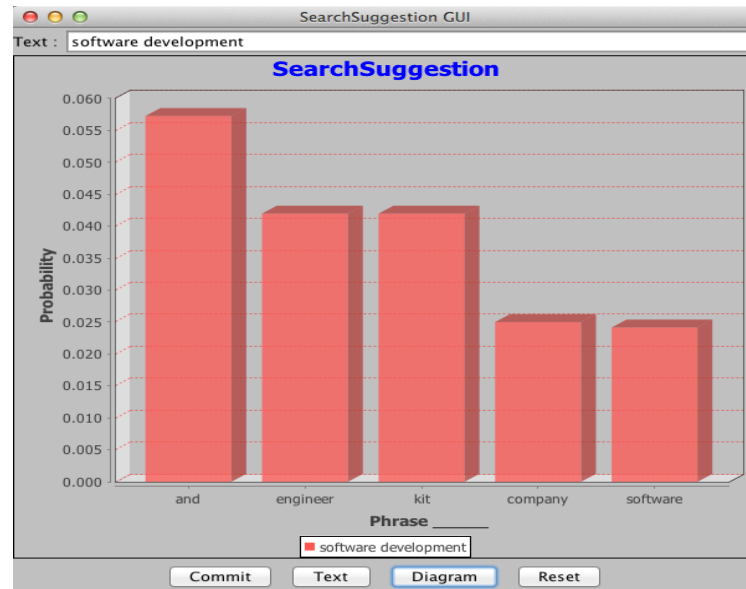
Script 8: Perform commitment when inputting two normal words.

[Initial state: Display screen blank; Textual display unavailable; Diagram display unavailable; Text input area is waiting for inputting]

1. PAG to input two English words: software, and click commit button;
2. The display screen shows the domains and its possibilities of the words.



3. PAG to click the Text Button.
4. The content of display screen and the status of the application don't change.
5. PAG to click the Diagram Button.
6. The result of domains and possibilities of the phrase will print as bar chart on the display screen.



7. PAG to click the Reset Button.
8. The application returns to the initial status.

Script 9: Perform commitment when inputting one or more spaces

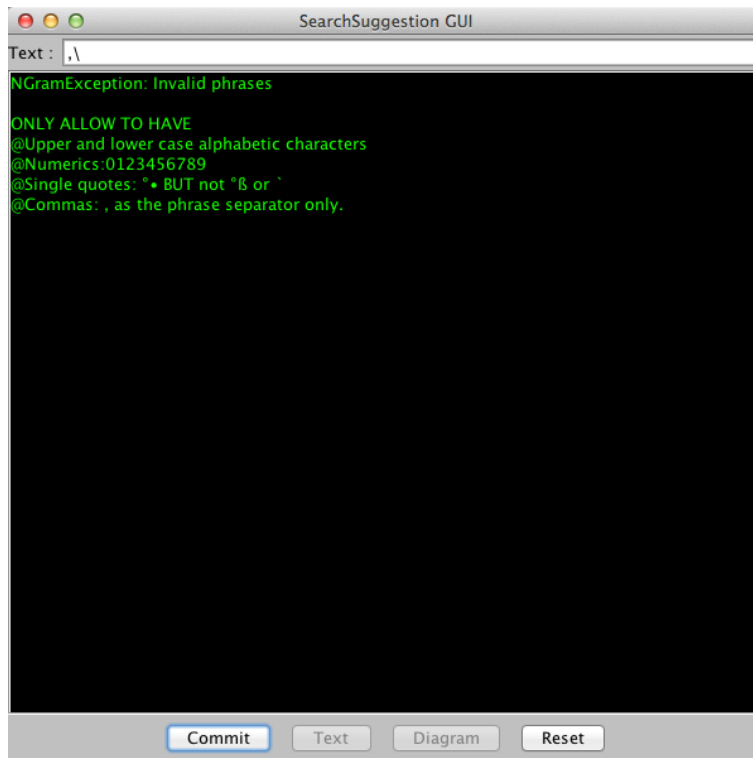
[Initial state: Display screen blank; Textual display unavailable; Diagram display unavailable; Text input area is waiting for inputting]

1. PAG to input two spaces, and click commit button;
2. Display screen prompts an exception, "NGramException: Please enter the context you would like to search", and the text and diagram button still unavailable.
3. PAG to click the reset button.
4. The display screen returns blank, and the text input area is waiting for inputting, and the application returns to initial status.

Script 10: Perform commitment when inputting two punctuations starting with comma

[Initial state: Display screen blank; Textual display unavailable; Diagram display unavailable; Text input area is waiting for inputting]

1. PAG to input two punctuations ",", and click commit button;
2. Display screen prompts an exception, saying that the phrase inputted is not valid and give some instructions of input, here the text and diagram button still unavailable.



3. PAG to click the reset button.
4. The display screen returns blank, and the text input area is waiting for inputting, and the application returns to initial status.

Script 11: Perform commitment when inputting two commas

[Initial state: Display screen blank; Textual display unavailable; Diagram display unavailable; Text input area is waiting for inputting]

1. PAG to enter two commas: “,,”, and click commit button.
2. Display screen prompts an exception, “NGramException: Please enter the context you would like to search”, and the text and diagram button still unavailable.
3. PAG to click the reset button.
4. The display screen returns blank, and the text input area is waiting for inputting, and the application returns to initial status.

Script 12: Perform commitment when inputting half single quotation

[Initial state: Display screen blank; Textual display unavailable; Diagram display unavailable; Text input area is waiting for inputting]

1. PAG to input half single quotation, and click commit button;
2. The application has no response and will be crashed.

Script 13: Perform commitment when inputting a single quotation

[Initial state: Display screen blank; Textual display unavailable; Diagram display unavailable; Text input area is waiting for inputting]

1. PAG to input a single quotation, and click commit button;

2. The application has no response and will be crashed.

Script 14: Perform commitment when inputting a comma and a single quotation

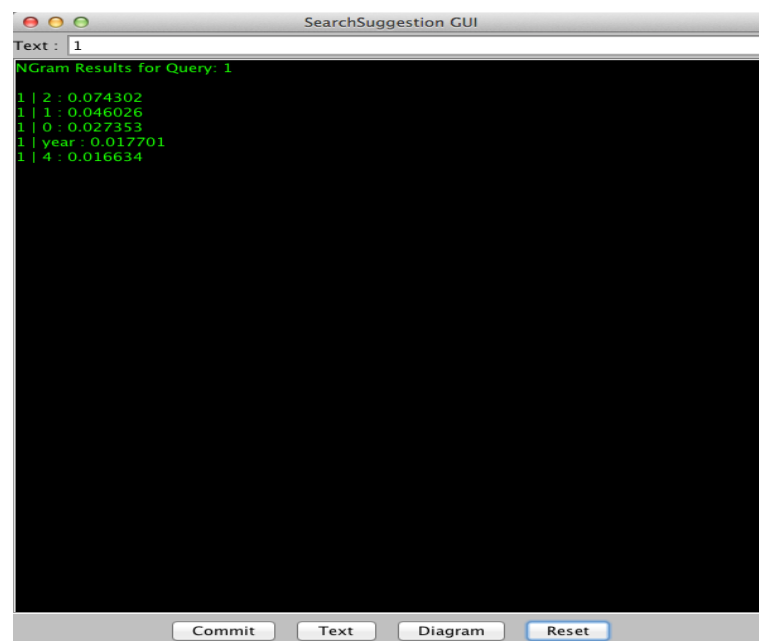
[Initial state: Display screen blank; Textual display unavailable; Diagram display unavailable; Text input area is waiting for inputting]

1. PAG to input a comma and a single quotation like “,” and click commit button;
2. The application has no response and will be crashed.

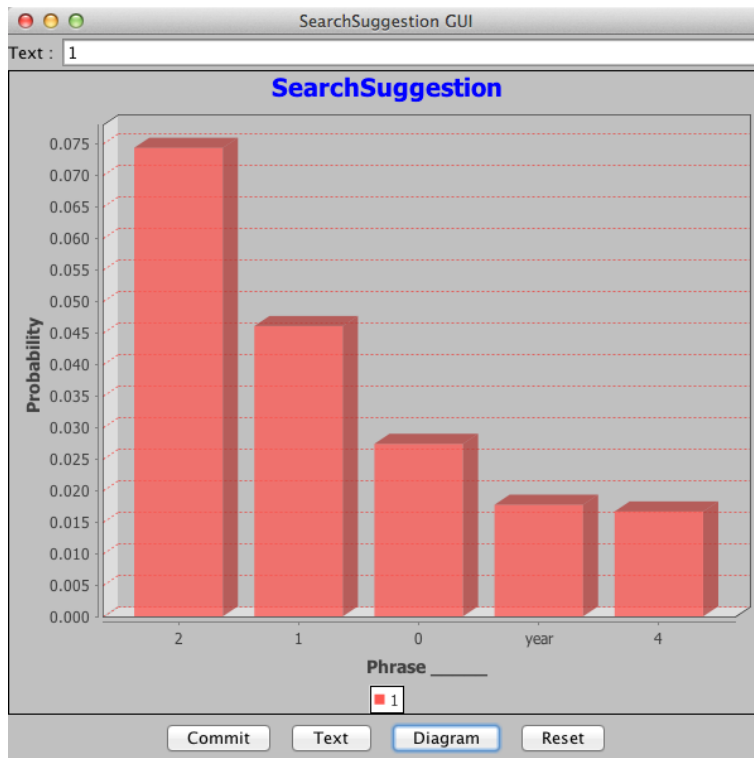
Script 15: Perform commitment when inputting a number

[Initial state: Display screen blank; Textual display unavailable; Diagram display unavailable; Text input area is waiting for inputting]

1. PAG to input a number, and click commit button;
2. The application has no response for about 1 minute, but the results are printed finally.



3. PAG to click the Text Button.
4. The content of display screen and the status of the application don't change.
5. PAG to click the Diagram Button.
6. The result of domains and possibilities of the number will print as bar chart on the display screen.

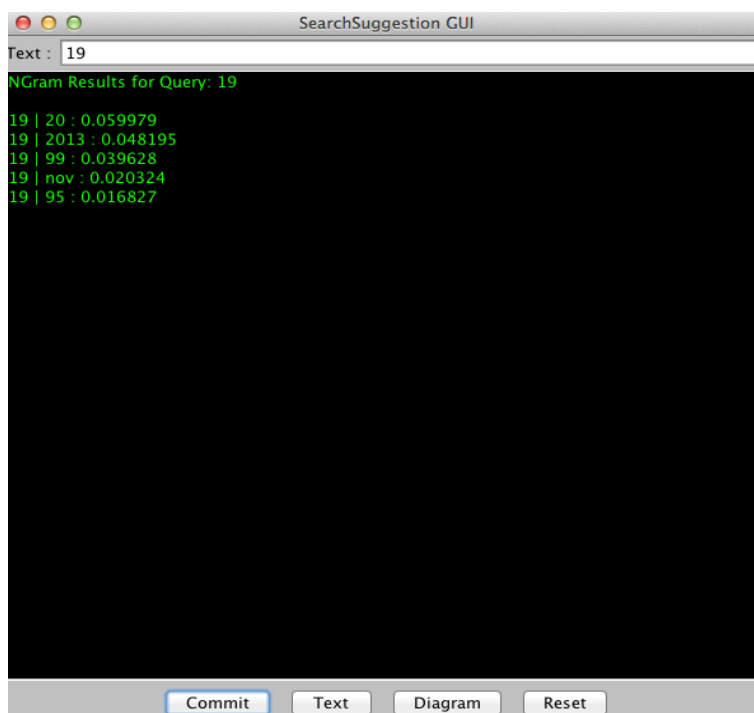


7. PAG to click the Reset Button.
8. The application returns to the initial status.

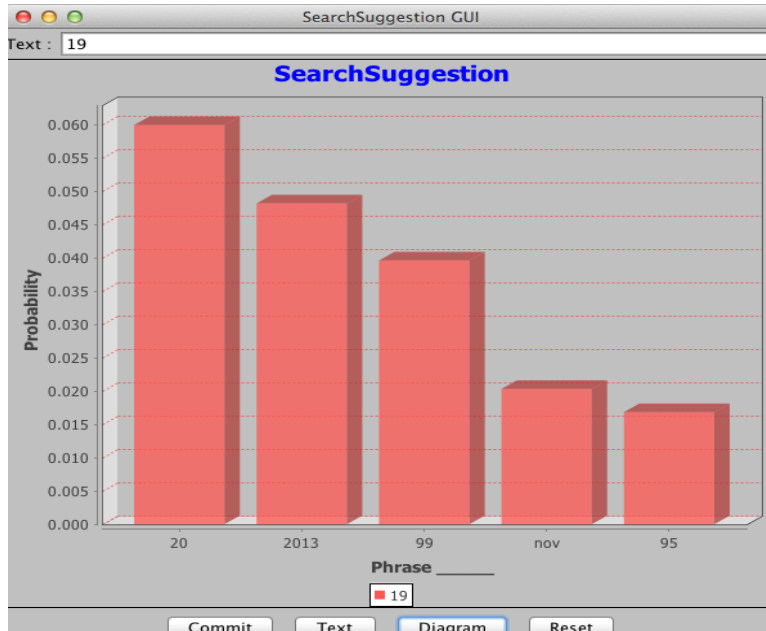
Script 16: Perform commitment when inputting two numbers

[Initial state: Display screen blank; Textual display unavailable; Diagram display unavailable; Text input area is waiting for inputting]

1. PAG to input two numbers, and click commit button;
2. The display screen shows the domains and its possibilities of the numbers.



3. PAG to click the Text Button.
4. The content of display screen and the status of the application don't change.
5. PAG to click the Diagram Button.
6. The result of domains and possibilities of the numbers will print as bar chart on the display screen.

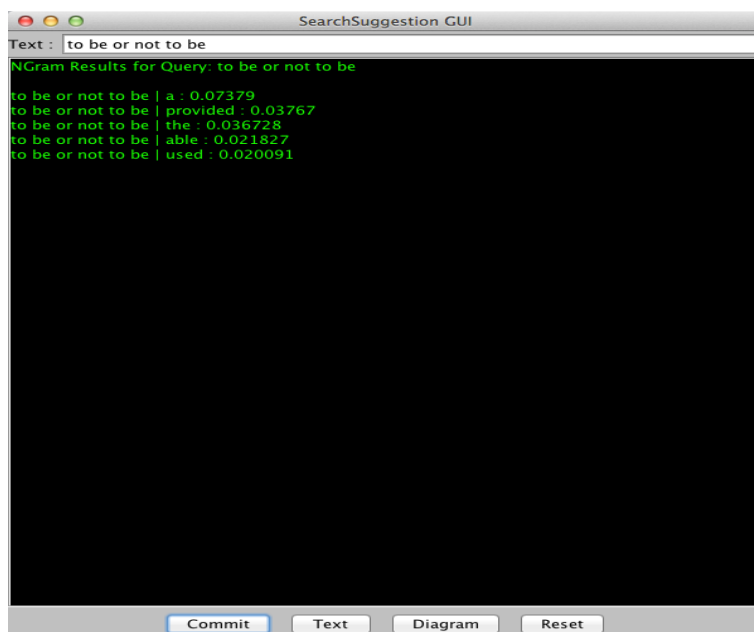


7. PAG to click the Reset Button.
8. The application returns to the initial status.

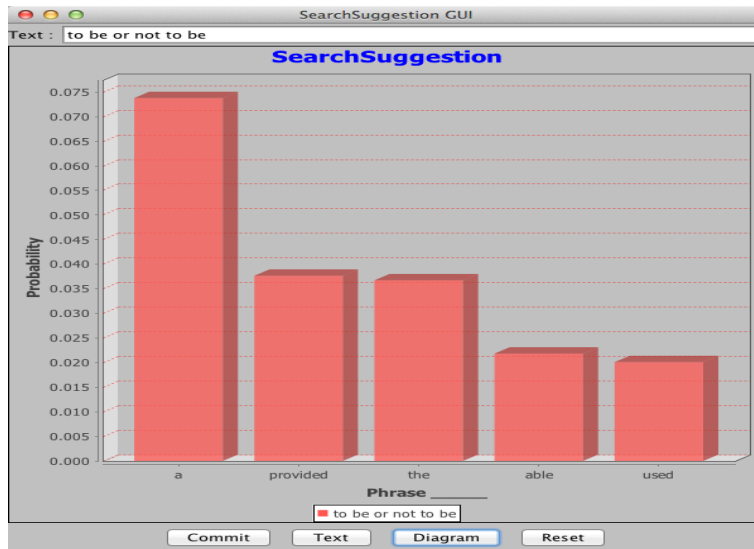
Script 17: Perform commitment when inputting a sentence

[Initial state: Display screen blank; Textual display unavailable; Diagram display unavailable; Text input area is waiting for inputting]

1. PAG to input a sentence, and click commit button;
2. The display screen shows the domains and its possibilities of the numbers.



3. PAG to click the Text Button.
4. The content of display screen and the status of the application don't change.
5. PAG to click the Diagram Button.
6. The result of domains and possibilities of the sentence will print as bar chart on the display screen.

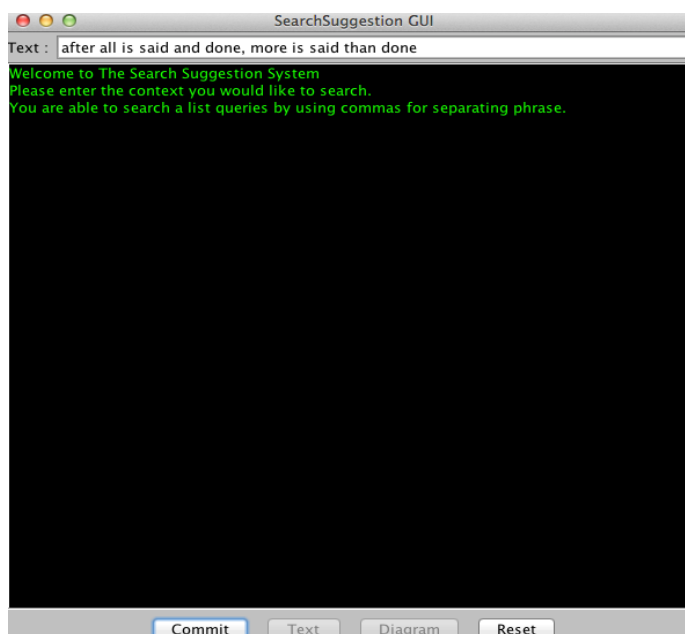


7. PAG to click the Reset Button.
8. The application returns to the initial status.

Script 18: Perform commitment when inputting two phrases, there is a space after comma.

[Initial state: Display screen blank; Textual display unavailable; Diagram display unavailable; Text input area is waiting for inputting]

1. PAG to enter a sentence with a comma, and click commit button.
2. Display screen shows nothing, and no any other actions as well.

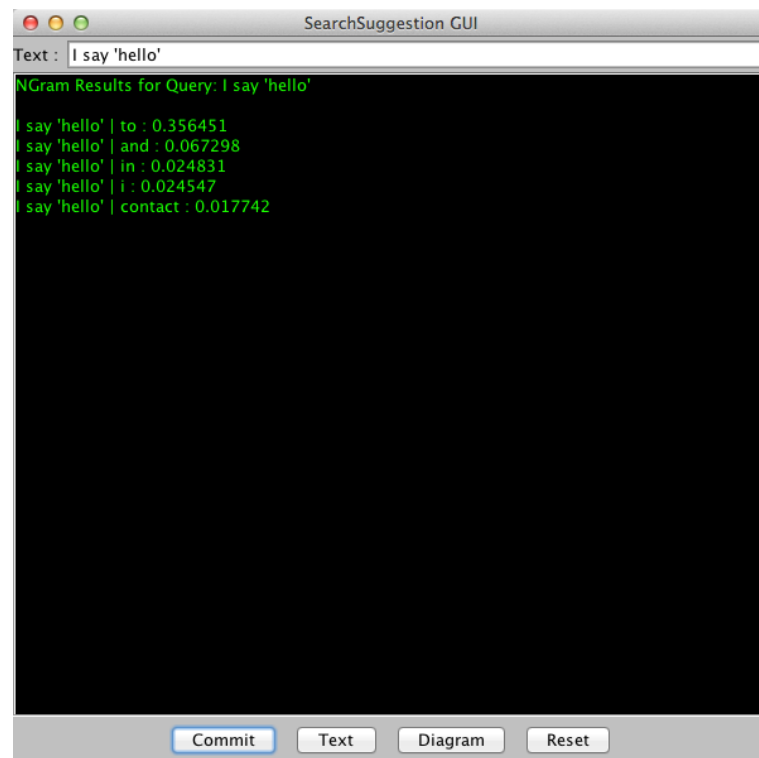


3. PAG to click the reset button.
4. The display screen returns, and the text input area is waiting for inputting, and the application returns to initial status.

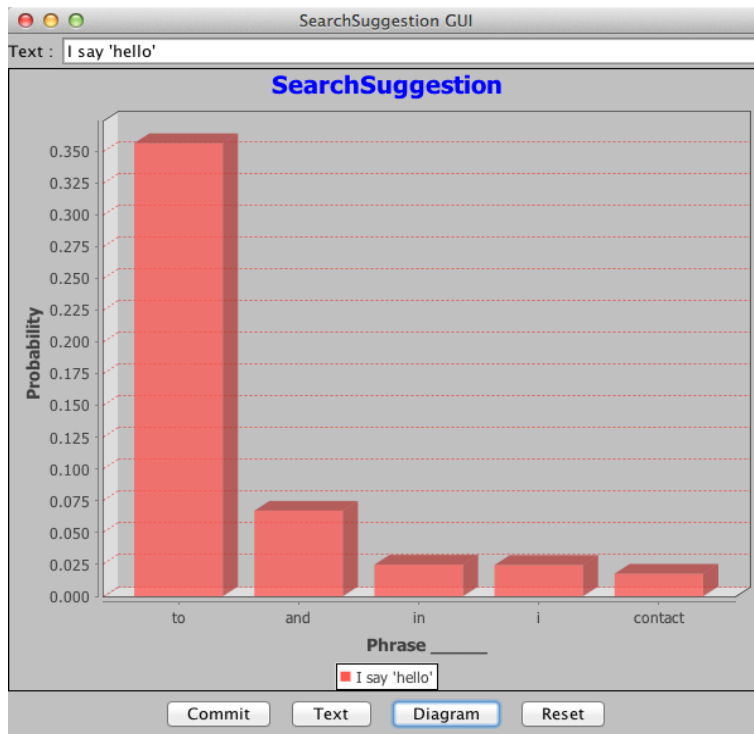
Script 19: Perform commitment when inputting a sentence with a single quotation in the middle.

[Initial state: Display screen blank; Textual display unavailable; Diagram display unavailable; Text input area is waiting for inputting]

1. PAG to input a sentence with a single quotation, and click commit button;
2. The display screen shows the domains and its possibilities of the sentence.



3. PAG to click the Text Button.
4. The content of display screen and the status of the application don't change.
5. PAG to click the Diagram Button.
6. The result of domains and possibilities of the sentence will print as bar chart on the display screen.

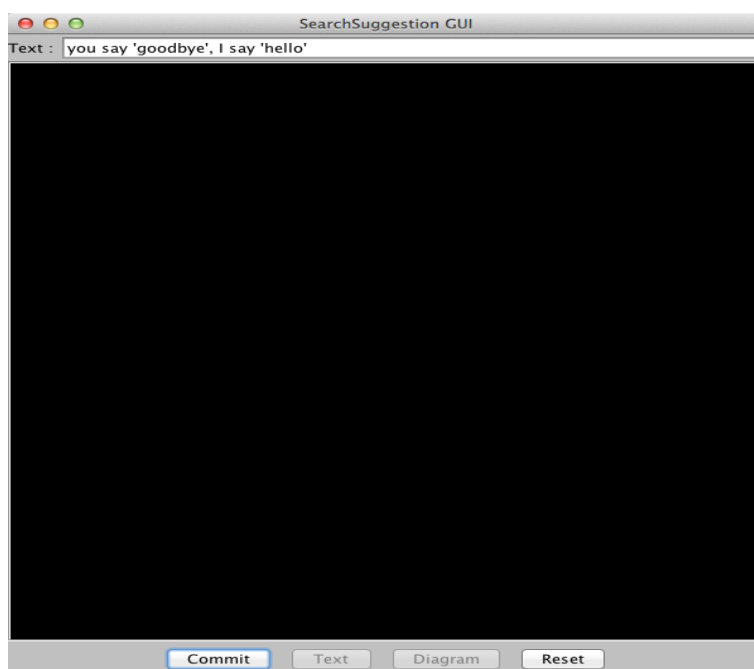


7. PAG to click the Reset Button.
8. The application returns to the initial status.

Script 20: Perform commitment when inputting a sentence with a single quotation and comma.

[Initial state: Display screen blank; Textual display unavailable; Diagram display unavailable; Text input area is waiting for inputting]

1. PAG to enter a sentence with a comma, and click commit button.
2. Display screen shows nothing, and no any other actions as well.

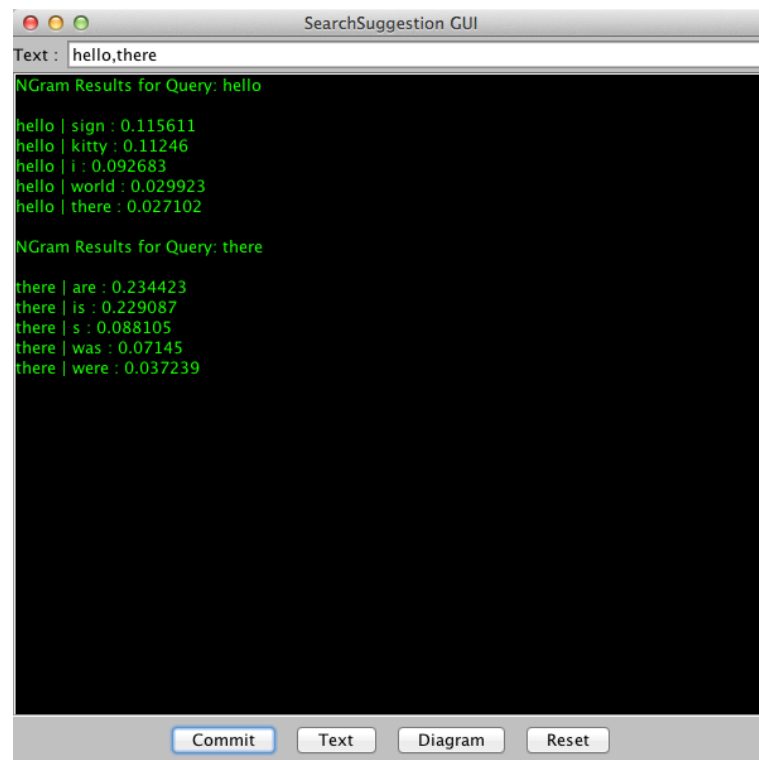


3. PAG to click the reset button.
4. The display screen returns, and the text input area is waiting for inputting, and the application returns to initial status.

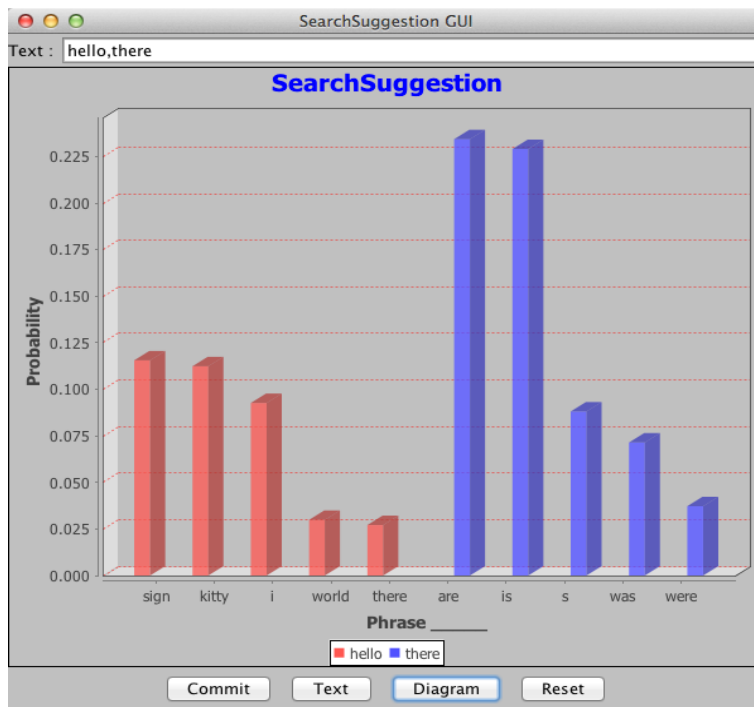
Script 21: Perform commitment when inputting two phrases, and there is no space after comma

[Initial state: Display screen blank; Textual display unavailable; Diagram display unavailable; Text input area is waiting for inputting]

1. PAG to input two phrases, and click commit button.
2. The display screen shows the domains and its possibilities of the two phrases.



3. PAG to click the Text Button.
4. The content of display screen and the status of the application don't change.
5. PAG to click the Diagram Button.
6. The result of domains and possibilities of the two phrases will print as bar chart on the display screen.

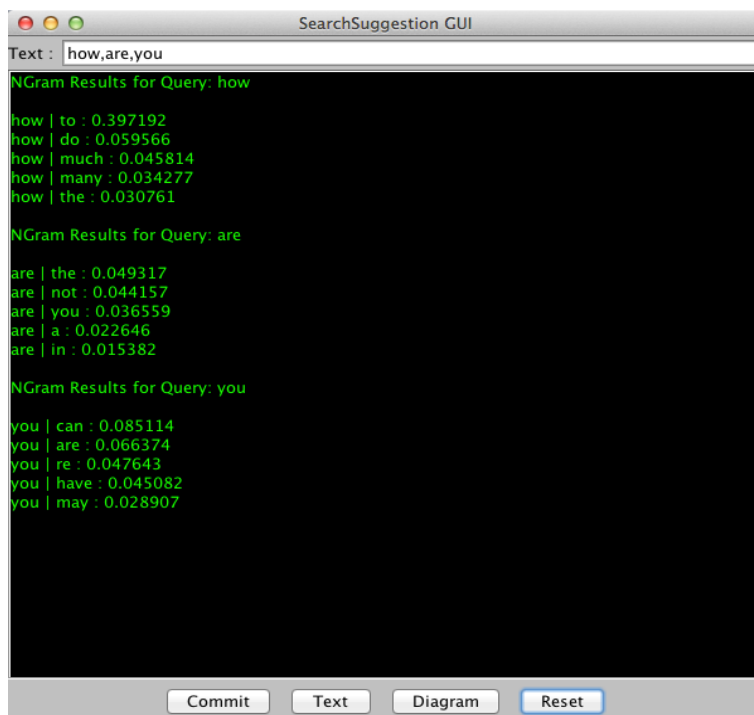


7. PAG to click the Reset Button.
8. The application returns to the initial status.

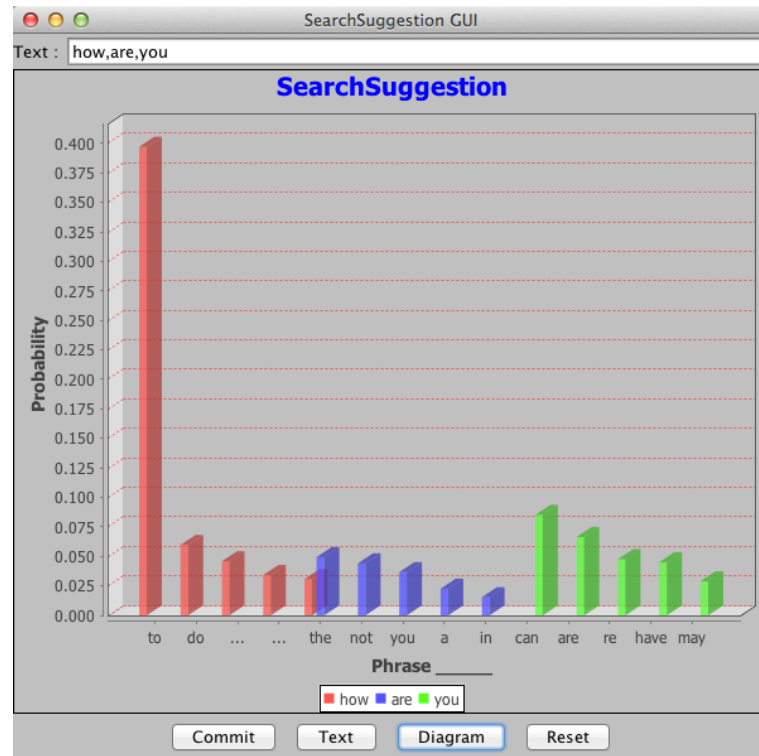
Script 22: Perform commitment when inputting three phrases, and there is no space after commas

[Initial state: Display screen blank; Textual display unavailable; Diagram display unavailable; Text input area is waiting for inputting]

1. PAG to input two phrases, and click commit button.
2. The display screen shows the domains and its possibilities of the three phrases.



3. PAG to click the Text Button.
4. The content of display screen and the status of the application don't change.
5. PAG to click the Diagram Button.
6. The result of domains and possibilities of the two phrases will print as bar chart on the display screen.



7. PAG to click the Reset Button.
8. The application returns to the initial status.