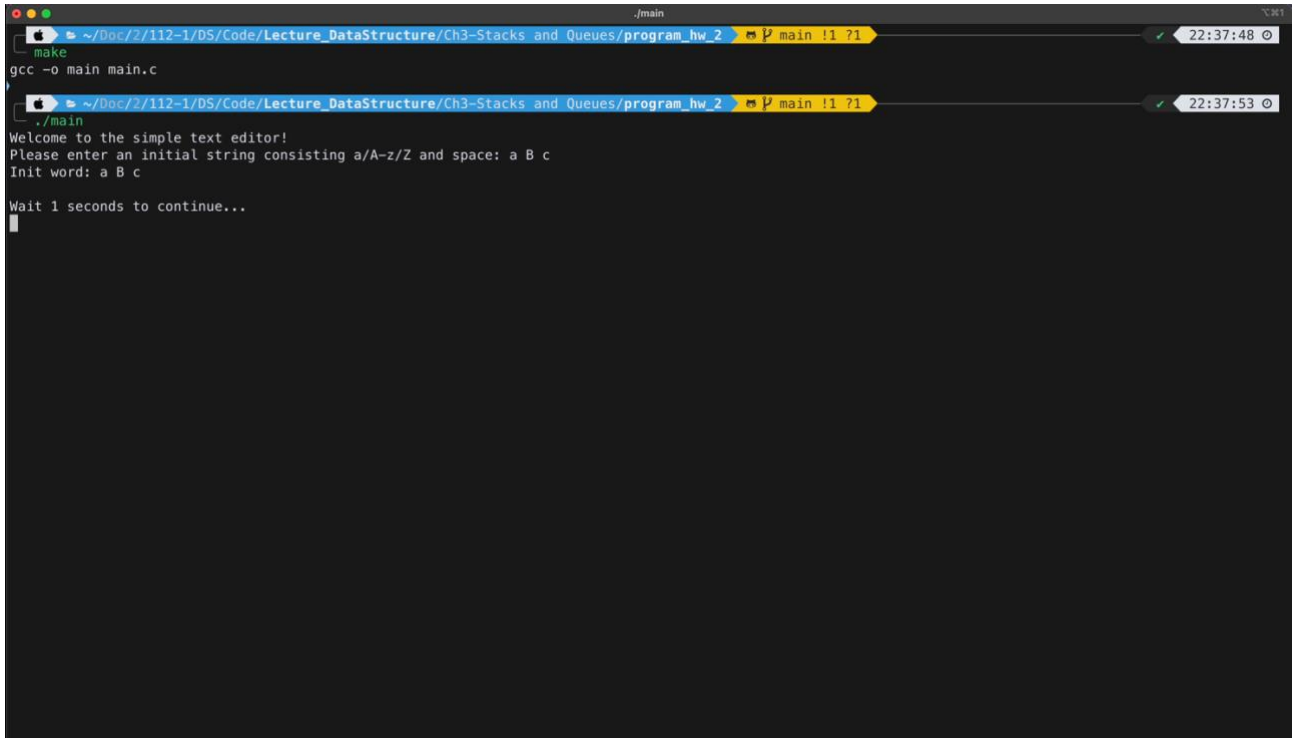


Data Structure Program HW 2

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Demo YouTube: <https://youtu.be/VGpDrP7--hg>

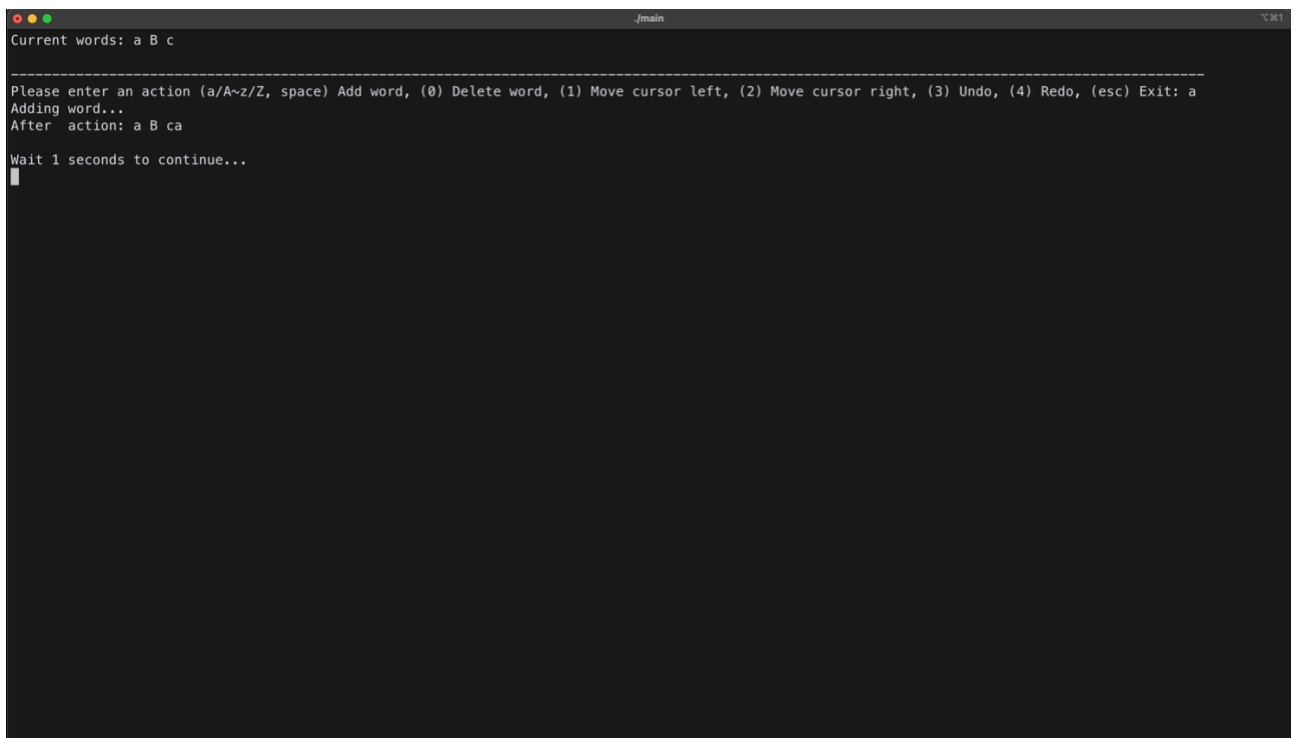
1. 顯示 "Please enter an initial string consisting a/A-z/Z and space:" 並讀入 input 字串。輸入為一串由大小寫英文字母及空白所構成的字串。按 "Enter" 鍵則結束讀入，輸出輸入資料(游標位置在輸入字串最後)。



```
~/main
└─ make
gcc -o main main.c
└─ ./main
Welcome to the simple text editor!
Please enter an initial string consisting a/A-z/Z and space: a B c
Init word: a B c
Wait 1 seconds to continue...
```

2. 提供以下功能指令:

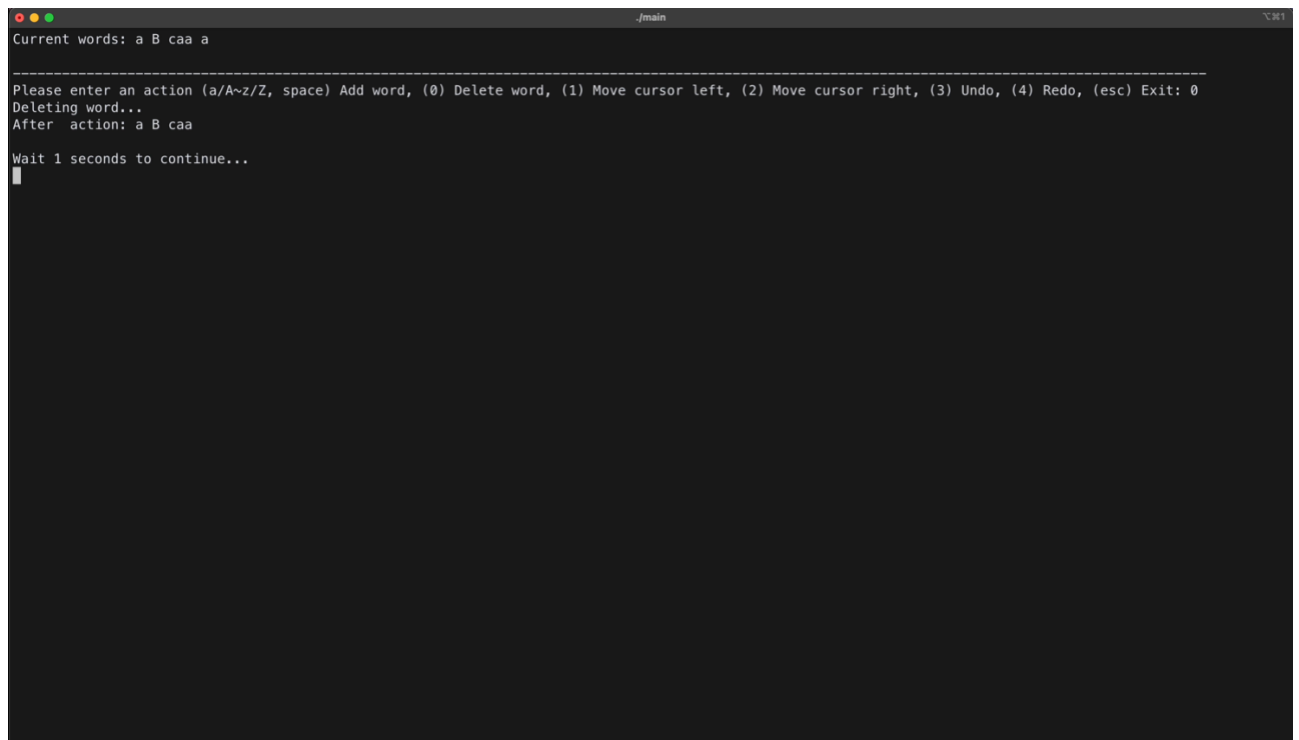
- 1) 新增字元(輸入 a/A-z/Z and space):從游標位置新增字元。



```
~/main
Current words: a B c

-----
Please enter an action (a/A~z/Z, space) Add word, (0) Delete word, (1) Move cursor left, (2) Move cursor right, (3) Undo, (4) Redo, (esc) Exit: a
Adding word...
After action: a B ca
Wait 1 seconds to continue...
```

- 2) 刪除字元(輸入 0):從游標位置向前刪除一個字元。

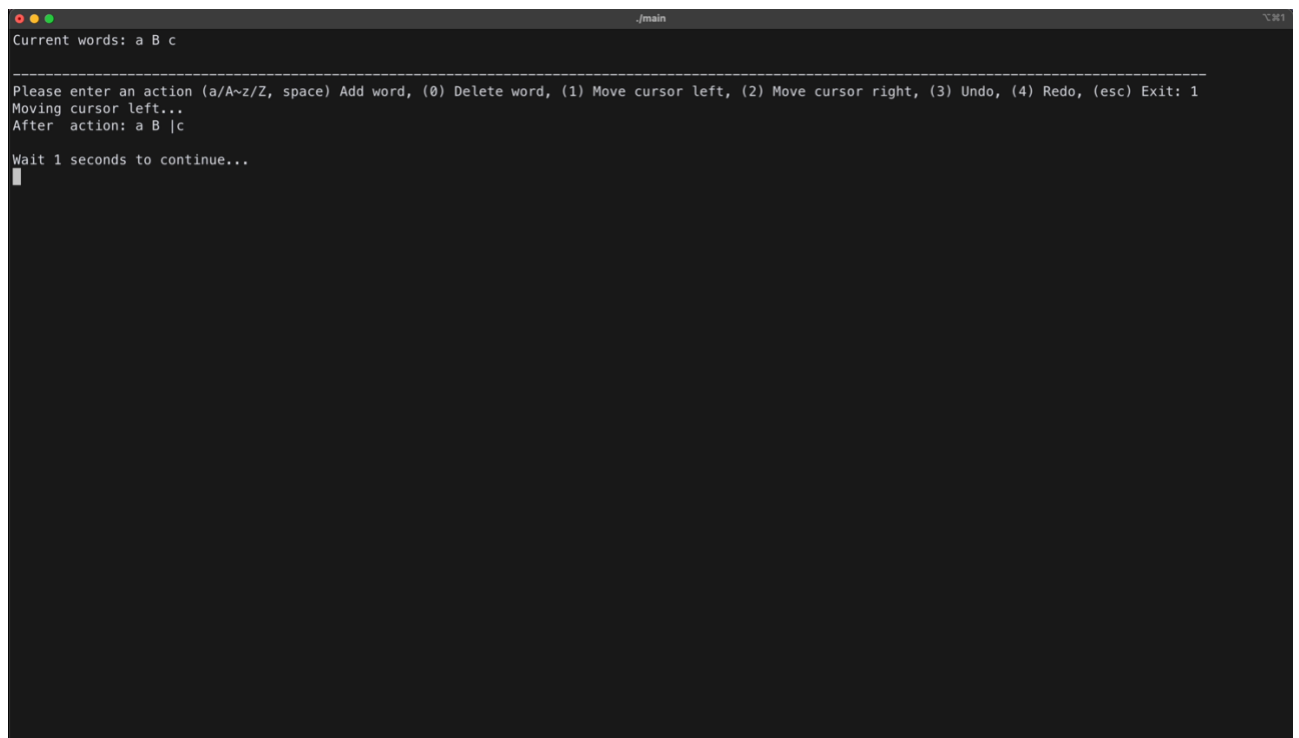


```
Current words: a B caa a

-----
Please enter an action (a/A~z/Z, space) Add word, (0) Delete word, (1) Move cursor left, (2) Move cursor right, (3) Undo, (4) Redo, (esc) Exit: 0
Deleting word...
After action: a B caa

Wait 1 seconds to continue...
```

- 3) 向左移動(輸入 1):游標位置向左移動一個字元，若游標位置不是在最後，則在該字元後加'|'表示。

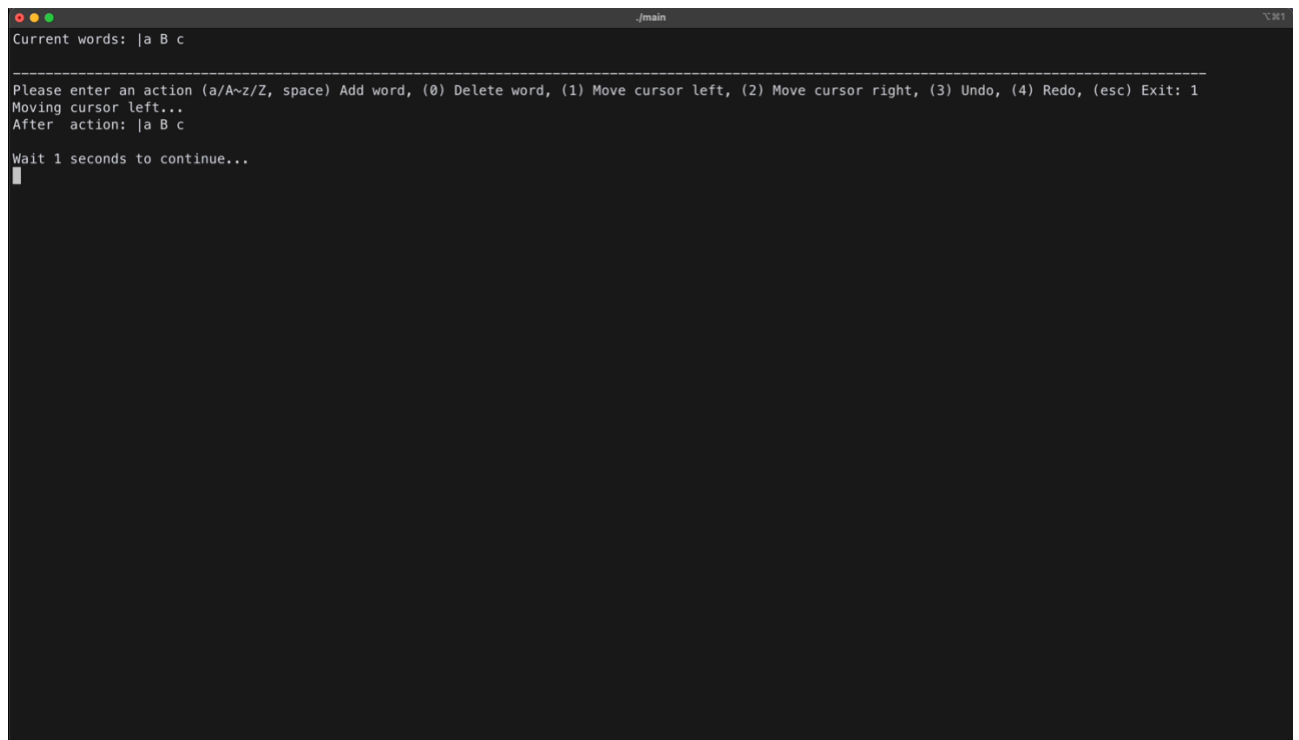


```
Current words: a B c

-----
Please enter an action (a/A~z/Z, space) Add word, (0) Delete word, (1) Move cursor left, (2) Move cursor right, (3) Undo, (4) Redo, (esc) Exit: 1
Moving cursor left...
After action: a B |c

Wait 1 seconds to continue...
```

游標若移動到第一個字元，再執行向左移動，則不改變。

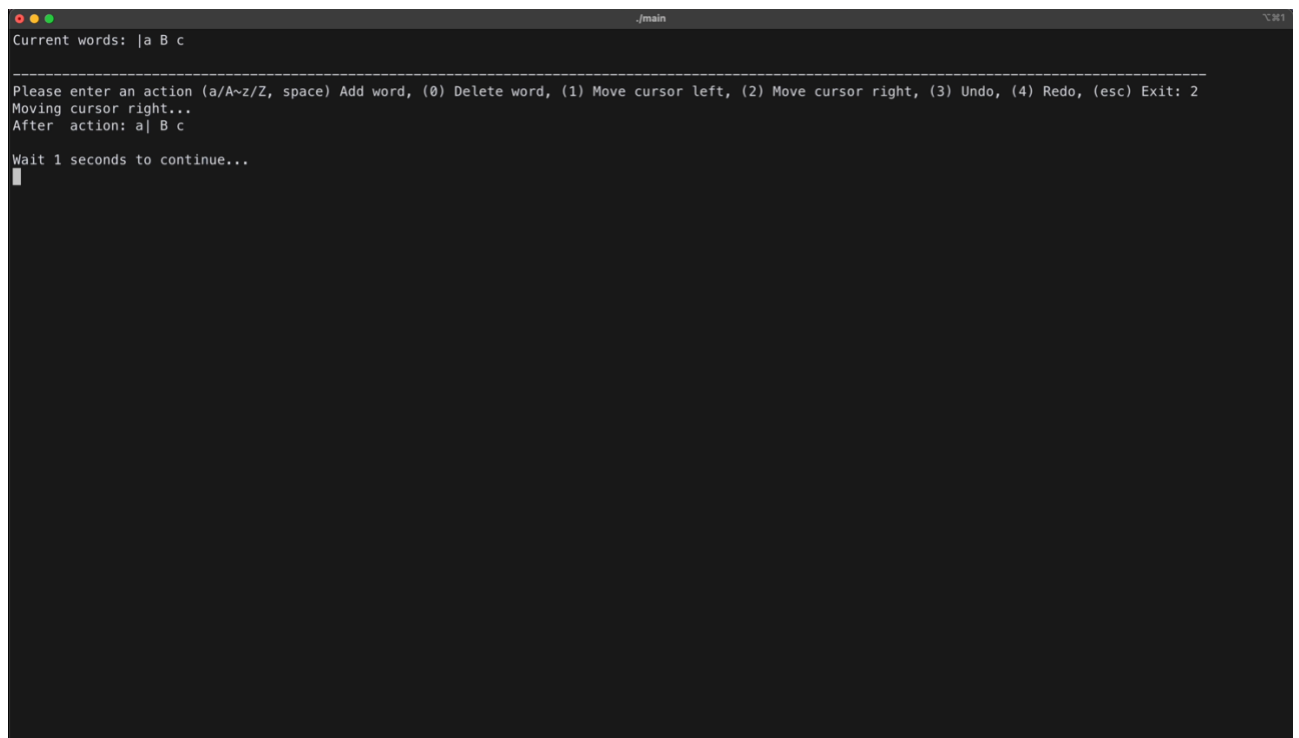


```
Current words: |a B c

-----
Please enter an action (a/A~z/Z, space) Add word, (0) Delete word, (1) Move cursor left, (2) Move cursor right, (3) Undo, (4) Redo, (esc) Exit: 1
Moving cursor left...
After action: |a B c

Wait 1 seconds to continue...
|
```

- 4) 向右移動(輸入 2):游標位置向右移動一個字元，若游標位置不是在最後，則在該字元後加'|'表示。

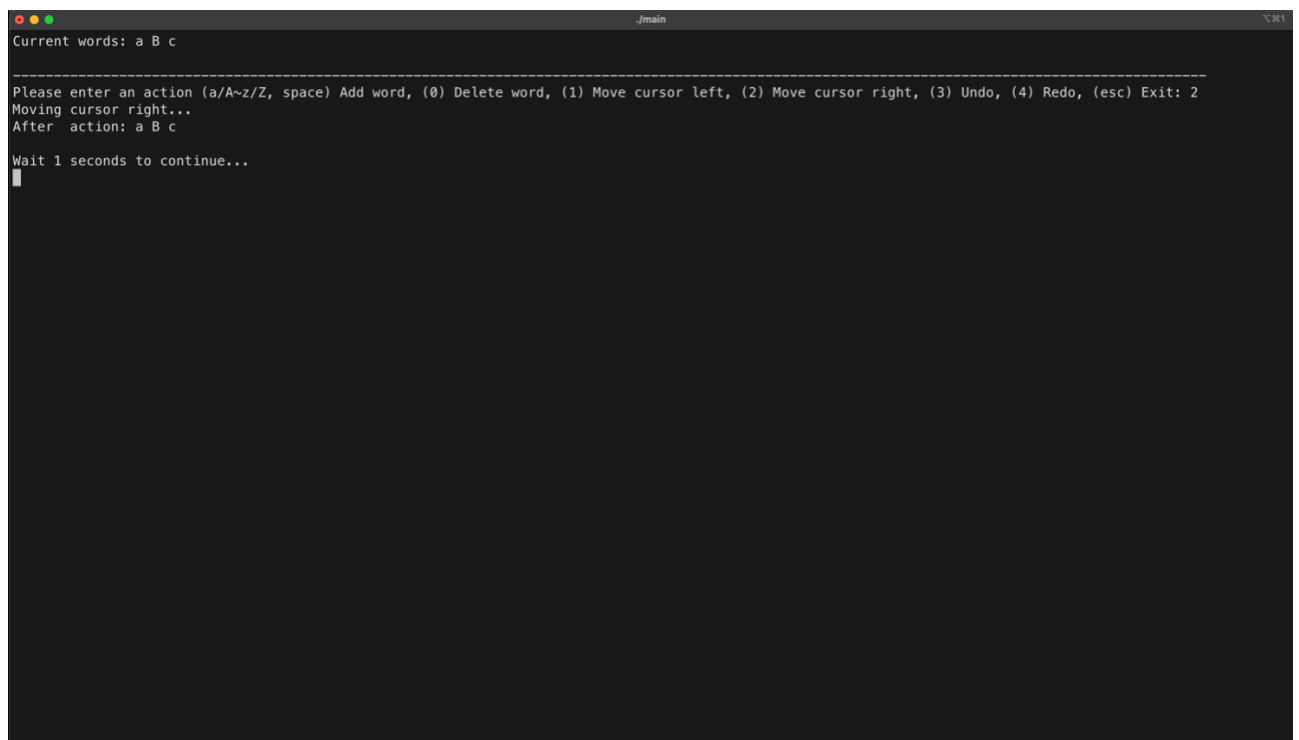


```
Current words: |a B c

-----
Please enter an action (a/A~z/Z, space) Add word, (0) Delete word, (1) Move cursor left, (2) Move cursor right, (3) Undo, (4) Redo, (esc) Exit: 2
Moving cursor right...
After action: a| B c

Wait 1 seconds to continue...
|
```

游標若移動到最後一個字元，再執行向右移動，則不改變。

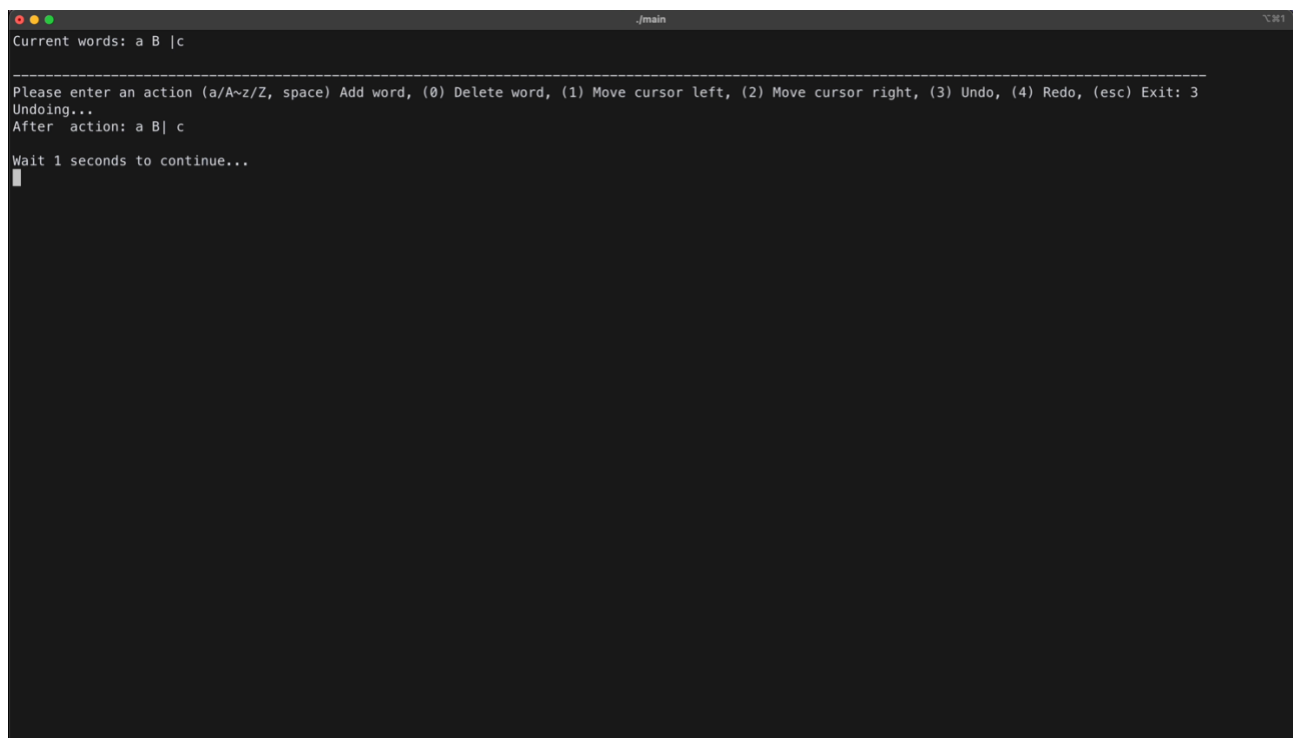


```
Current words: a B c

-----
Please enter an action (a/A~z/Z, space) Add word, (0) Delete word, (1) Move cursor left, (2) Move cursor right, (3) Undo, (4) Redo, (esc) Exit: 2
Moving cursor right...
After action: a B c

Wait 1 seconds to continue...
█
```

5) redo:重作被 undo 的指令，指令順序跟被 undo 的順序相反。

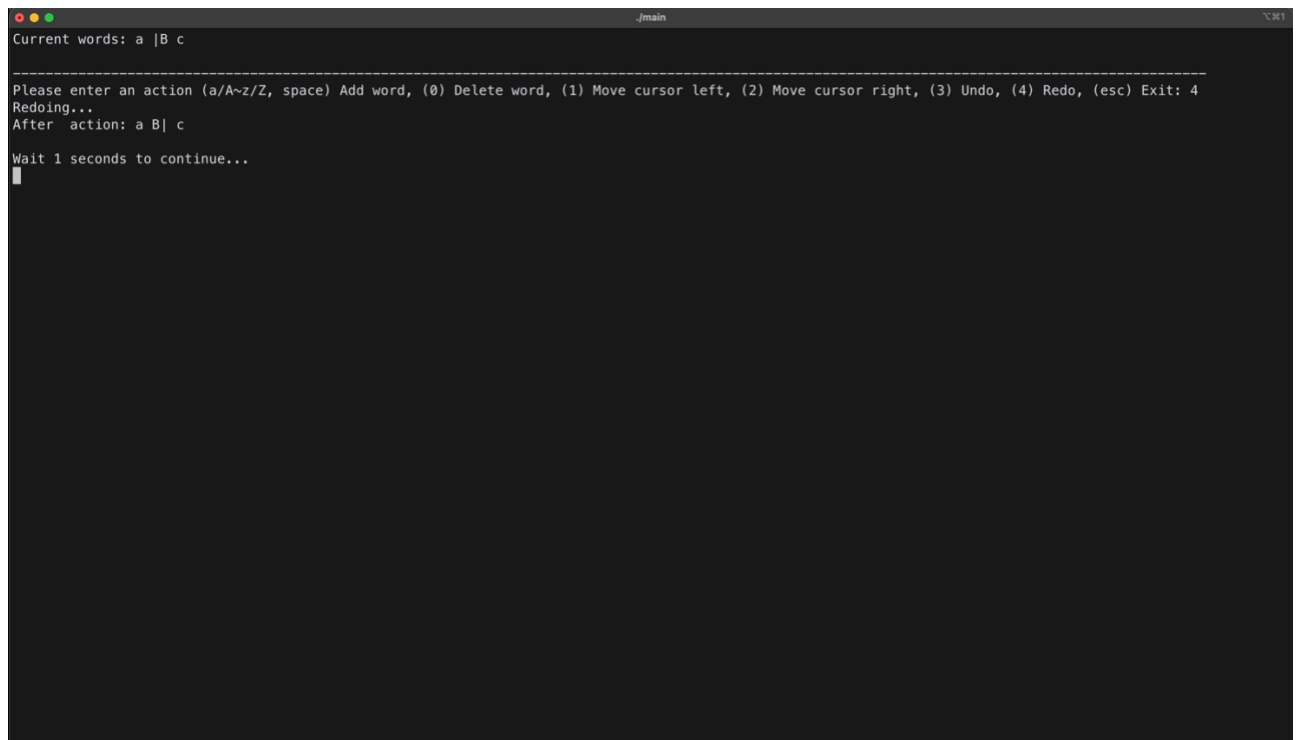


```
Current words: a B |c

-----
Please enter an action (a/A~z/Z, space) Add word, (0) Delete word, (1) Move cursor left, (2) Move cursor right, (3) Undo, (4) Redo, (esc) Exit: 3
Undoing...
After action: a B| c

Wait 1 seconds to continue...
█
```

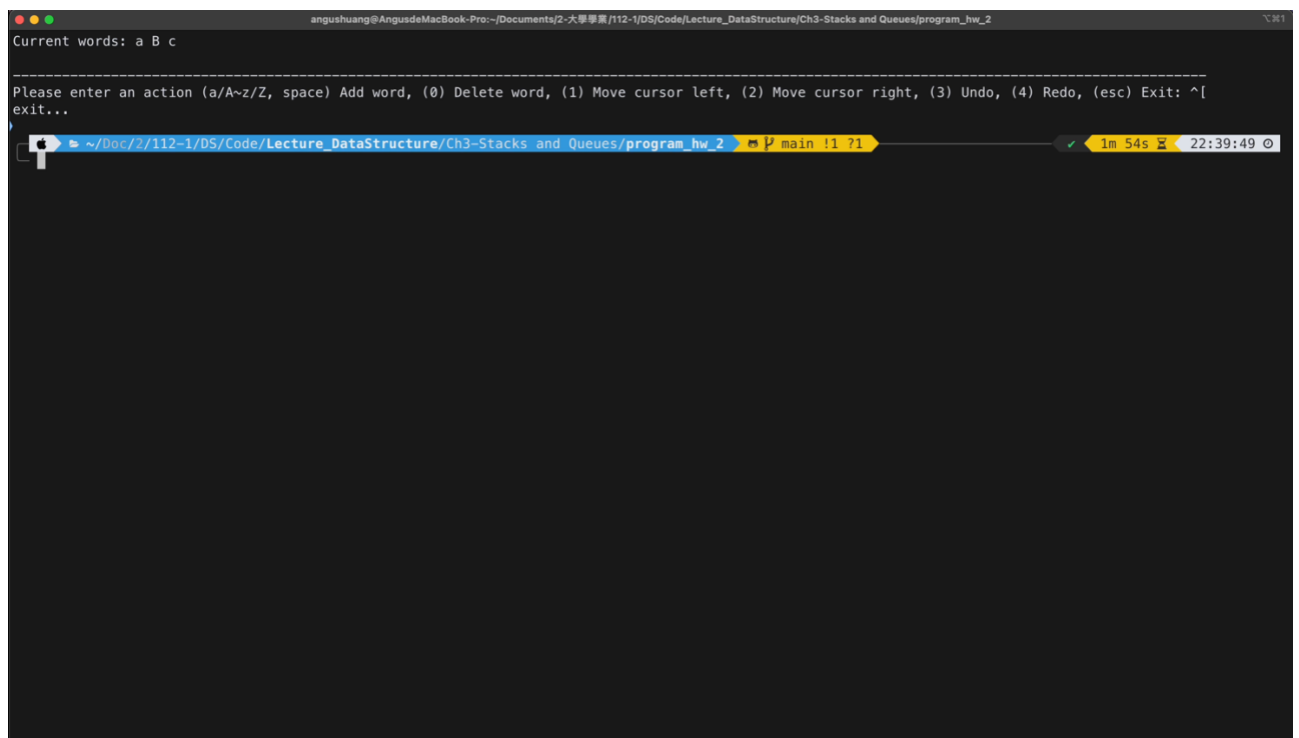
6) undo:回復前一指令(新增/刪除/向左/向右執行前的結果)。



```
Current words: a |B c

-----
Please enter an action (a/A~z/Z, space) Add word, (0) Delete word, (1) Move cursor left, (2) Move cursor right, (3) Undo, (4) Redo, (esc) Exit: 4
Redoing...
After action: a B| c
Wait 1 seconds to continue...
|
```

7) 可重覆以上功能指令，直到按"Esc"鍵則停止程式執行。



```
Current words: a B c

-----
Please enter an action (a/A~z/Z, space) Add word, (0) Delete word, (1) Move cursor left, (2) Move cursor right, (3) Undo, (4) Redo, (esc) Exit: ^[
exit...
|
```

Terminal status bar: ~/Doc/2/112-1/DS/Code/Lecture_DataStructure/Ch3-Stacks and Queues/program_hw_2 | main !1 ?1 | 1m 54s | 22:39:49