TEST CASE #1

Enter "1" and view the current wordlists and then go back to the main menu.

```
WORD SEARCH GENERATOR
--------------------
Enter 1 to view the wordlists.
Enter 2 to create a new wordlist.
Enter 3 to generate a word search.
Enter 4 to quit.
CHOICE: 1

1: Foods: [RAMEN, CANDY, PIZZA, CHEESE, CAKE]
2: Sports: [SOCCER, CRICKET, RUGBY, TRACK]
3: Threes: [CAT, DOG, TAP, MAP, LAP, SAT, FAT, GAP, RAP, NAP]

Are you done?
Type 'y' if you are: y
```

Note: This test case demonstrates how to view the wordlists.

TEST CASE #2

Enter "2" and create a new wordlist. Enter "Toronto Cities" for the name of the Wordlist and enter 3 for the number of words. Type in the following words on separate lines on input: "Toronto"; "Halifax"; "Ottawa". Go back to the main menu, enter "1" and view wordlists.

```
WORD SEARCH GENERATOR
---------------------
Enter 1 to view the wordlists.
Enter 2 to create a new wordlist.
Enter 3 to generate a word search.
Enter 4 to quit.
CHOICE: 2

Let's create a new wordlist.
What is the name of this list? : Toronto Cities

How many words do you want? Enter an integer: 3
WORD #1: Toronto
WORD #2: Halifax
WORD #3: Ottawa
```

```
WORD SEARCH GENERATOR
---------------------
Enter 1 to view the wordlists.
Enter 2 to create a new wordlist.
Enter 3 to generate a word search.
Enter 4 to quit.
CHOICE: 1

1: Foods: [RAMEN, CANDY, PIZZA, CHEESE, CAKE]
2: Sports: [SOCCER, CRICKET, RUGBY, TRACK]
3: Threes: [CAT, DOG, TAP, MAP, LAP, SAT, FAT, GAP, RAP, NAP]
4: Toronto Cities: [TORONTO, HALIFAX, OTTAWA]
```

Note: This test case demonstrates how to make a custom wordlist, this list will be saved for future reference.

TEST CASE #3

Enter "3" and to create a word search. Enter "1" to choose from pre-created Wordlists. Enter "1" to choose the "Foods" Wordlist.

```
WORD SEARCH GENERATOR
---------------------
Enter 1 to view the wordlists.
Enter 2 to create a new wordlist.
Enter 3 to generate a word search.
Enter 4 to quit.
CHOICE: 3

Would you like to use a created wordlist or enter new words right now?
Enter 1 for a created wordlist.
Enter 2 for new words right now.
CHOICE: 1

1: Foods: [RAMEN, CANDY, PIZZA, CHEESE, CAKE]
2: Sports: [SOCCER, CRICKET, RUGBY, TRACK]
3: Threes: [CAT, DOG, TAP, MAP, LAP, SAT, FAT, GAP, RAP, NAP]
4: Toronto Cities: [TORONTO, HALIFAX, OTTAWA]

Enter the number of the wordlist you would like:
1
```

```
C P I Z Z A G G
H L B X Z Y L Y
E R A M E N J R
E J K C J C U Y
S P B A M A S M
E I R N W K D Q
M M T D Z E R X
S G F Y F R P W

Foods: [CHEESE, RAMEN, CANDY, PIZZA, CAKE]
All the words were printed.
```

Note: This test case demonstrates how to make a word search with a default wordlist. The current word placing algorithm attempts to place words in the opposite orientation (vertical if the previous word was horizontal) as the previous word, although if it cannot fit then it will try the other orientation. It favours positions along the top row and left side and only places words forwards, and never diagonally. In the future we would love to improve the randomness of the algorithm and try to place words in overlapping positions if possible.

TEST CASE #4

Enter "3" and to create a word search. Enter "2" to enter the words you want for the wordlist. Enter "Ghibli Characters" as the name. Enter "4" as the number of words in the list. On each line enter these words as prompted: "Totoro"; "Kiki"; "Gigi"; "Catbus".

```
WORD SEARCH GENERATOR
 0 items ───────────────
 ᴇnter 1 to view the wordlists.
Enter 2 to create a new wordlist.
Enter 3 to generate a word search.
Enter 4 to quit.
CHOICE: 3

Would you like to use a created wordlist or enter new words right now?
Enter 1 for a created wordlist.
Enter 2 for new words right now.
CHOICE: 2
Let's create a new wordlist.
What is the name of this list? : Ghibli Characters

How many words do you want? Enter an integer: 4
WORD #1: Totoro
WORD #2: Kiki
WORD #3: Gigi
WORD #4: Catbus

T W G L K L X C
O L G W I Q V C
T M M L K O R Z
O O L W I K Q N
R J K G S H H U
O C A T B U S U
G I G I T D X F
Y C K C V I D V

Ghibli Characters [TOTORO, CATBUS, KIKI, GIGI]
All the words were printed.

Are you done?
Type 'y' if you are:
```

Note: This test case demonstrates how to make a word search with a temporary user created wordlist, these wordlists are not saved anywhere after the program runs.

TEST CASE #5

Enter "3" and to create a word search. Enter "2" to enter the words you want for the wordlist. Enter "Empty" as the name. Enter "1" as the number of words in the list. On the next line press enter without any input. Then when prompted again enter "okay".

```
WORD SEARCH GENERATOR
---------------------
Enter 1 to view the wordlists.
Enter 2 to create a new wordlist.
Enter 3 to generate a word search.
Enter 4 to quit.
CHOICE: 3

Would you like to use a created wordlist or enter new words right now?
Enter 1 for a created wordlist.
Enter 2 for new words right now.
CHOICE: 2
Let's create a new wordlist.
What is the name of this list? : Empty

How many words do you want? Enter an integer: 1
WORD #1:
Enter a word of minimum 2 letters: okay

O W K R C X
O K A Y A H
W E D I H C
Y D V G N K
Q Y L I N R
F L O O B N
```

```
Empty [OKAY]
All the words were printed.
```

Note: This test case demonstrates that if you enter a word shorter than two letters, the program does not accept the input and prompts the user for a longer word.

TEST CASE #6

Enter "3" and to create a word search. Enter "2" to enter the words you want for the wordlist. Enter "Non-alphabetical" as the name. Enter "4" as the number of words in the list. On each line enter these words as prompted: "l33t"; " " (two spaces); "@@@"; "B O O".

```
WORD SEARCH GENERATOR
---------------------
Enter 1 to view the wordlists.
Enter 2 to create a new wordlist.
Enter 3 to generate a word search.
Enter 4 to quit.
CHOICE: 3

Would you like to use a created wordlist or enter new words right now?
Enter 1 for a created wordlist.
Enter 2 for new words right now.
CHOICE: 2
Let's create a new wordlist.
What is the name of this list? : Non-alphabetical

How many words do you want? Enter an integer: 4
WORD #1: l33t
WORD #2:
WORD #3: @@@
WORD #4: B O O

T L @ T P L B
R O @ W E Q
F K @     F O
K U E D I J
L 3 3 T Q D O
H D J M Z F K
G L E W R K H

Non-alphabetical [B O O, L33T, @@@,    ]
All the words were printed.

Are you done?
Type 'y' if you are:
```

Notes: This test case shows that if you enter non-alphabetical input the program still runs placing numbers, special characters and even spaces into the code. To fix this more robust input would need to be implemented.

TEST CASE #7

Enter "3" to create a word search. Enter "1" to choose from pre-created Wordlists. Enter "3" to choose the "Threes" Wordlist.

```
WORD SEARCH GENERATOR
---------------------
Enter 1 to view the wordlists.
Enter 2 to create a new wordlist.
Enter 3 to generate a word search.
Enter 4 to quit.
CHOICE: 3

Would you like to use a created wordlist or enter new words right now?
Enter 1 for a created wordlist.
Enter 2 for new words right now.
CHOICE: 1

1: Foods: [RAMEN, CANDY, PIZZA, CHEESE, CAKE]
2: Sports: [SOCCER, CRICKET, RUGBY, TRACK]
3: Threes: [CAT, DOG, TAP, MAP, LAP, SAT, FAT, GAP, RAP, NAP]
4: Empty: [HAPPY, PI, SAD]

Enter the number of the wordlist you would like:
3

G D F A T
A O T A P
P G M S M
C A T A A
L A P T P

Threes: [CAT, DOG, TAP, MAP, LAP, SAT, FAT, GAP, RAP, NAP]
Some words were not printed:
RAP
NAP

Are you done?
Type 'y' if you are:
```

Note: This test case demonstrates that if there are too many words to fit in the grid, then which words that did not fit are communicated to the user.

TEST CASE #8

Enter "2" to create a new wordlist. For the name of the wordlist, enter "Zero". When prompted with how many words, enter "0".

```
WORD SEARCH GENERATOR
----------------------
Enter 1 to view the wordlists.
Enter 2 to create a new wordlist.
Enter 3 to generate a word search.
Enter 4 to quit.
CHOICE: 2

Let's create a new wordlist.
What is the name of this list? : Zero

How many words do you want? Enter an integer: 0
Minimum 1 word:
```

Note: The minimum number of words must be at least 1.

TEST CASE #9

Enter "2" to create a new wordlist. Enter "Local" as the name of the wordlist. Enter "2" for the number of words. Enter the following words on separate lines: "Computer"; "Storage". Exit the program, re-enter the program. Run the program and select "1" in the main menu to view wordlists.

BEFORE EXITING

```
WORD SEARCH GENERATOR
---------------------
Enter 1 to view the wordlists.
Enter 2 to create a new wordlist.
Enter 3 to generate a word search.
Enter 4 to quit.
CHOICE: 2

Let's create a new wordlist.
What is the name of this list? : Local

How many words do you want? Enter an integer: 2
WORD #1: Computer
WORD #2: Storage
```

AFTER RE-RUNNING

```
WORD SEARCH GENERATOR
---------------------
Enter 1 to view the wordlists.
Enter 2 to create a new wordlist.
Enter 3 to generate a word search.
Enter 4 to quit.
CHOICE: 1

1: Foods: [RAMEN, CANDY, PIZZA, CHEESE, CAKE]
2: Sports: [SOCCER, CRICKET, RUGBY, TRACK]
3: Threes: [CAT, DOG, TAP, MAP, LAP, SAT, FAT, GAP, RAP, NAP]
4: Toronto Cities: [TORONTO, HALIFAX, OTTAWA]
5: Local: [COMPUTER, STORAGE]
```