

Test plan for the text editor consists of simply testing the basic functionality of the commands; in some cases, both simple and more complicated cases were taken into account (insertion), otherwise, worst case scenarios were used. Insertion in different strings of the line worked well; it is easy to insert a string of text in the beginning of it, in the middle and in the end.

Up until paste test, two string were used: 22 characters of “a” and “b”

```
C:\Users\bubli\OneDrive\Desl  X  +  v  -  □  X

--- Text Editor Menu ---
1. Insert text
2. Delete text
3. Cut text
4. Copy text
5. Paste text
6. Undo last command
7. Redo last command
8. View text
9. New line
10. Exit
Enter the command you want to do: 9
Enter text to append (type 'end' on a new line to finish):
aaaaaaaaaaaaaaaaaaaaaa
bbbbbbbbbbbbbbbbbbbb
end

--- Text Editor Menu ---
1. Insert text
2. Delete text
3. Cut text
4. Copy text
5. Paste text
6. Undo last command
7. Redo last command
8. View text
9. New line
10. Exit
Enter the command you want to do: |
```

```
C:\Users\bubli\OneDrive\Desl  X  +  v  -  □  X

Enter line number, index and text to insert: 0 0 bbbbbbb

--- Text Editor Menu ---
1. Insert text
2. Delete text
3. Cut text
4. Copy text
5. Paste text
6. Undo last command
7. Redo last command
8. View text
9. New line
10. Exit
Enter the command you want to do: 8
Current Text
1: bbbbbbbbaaaaaaaaaaaaaaaaaa
2: bbbbbbbbbbbbbbbbbbb

--- Text Editor Menu ---
1. Insert text
2. Delete text
3. Cut text
4. Copy text
5. Paste text
6. Undo last command
7. Redo last command
8. View text
9. New line
10. Exit
Enter the command you want to do: |
```

```
C:\Users\bubli\OneDrive\Desl x + v
Enter line number, index and text to insert: 0 5 bbbbbbbb

--- Text Editor Menu ---
1. Insert text
2. Delete text
3. Cut text
4. Copy text
5. Paste text
6. Undo last command
7. Redo last command
8. View text
9. New Line
10. Exit
Enter the command you want to do: 8
Current Text
1: aaaaabbbbbbbbaaaaaaaaaaaaaa
2: bbbbbbbbbbbbbbbbbbbb

--- Text Editor Menu ---
1. Insert text
2. Delete text
3. Cut text
4. Copy text
5. Paste text
6. Undo last command
7. Redo last command
8. View text
9. New Line
10. Exit
Enter the command you want to do: |
```

```
C:\Users\bubli\OneDrive\Desl x + v
Enter line number, index and text to insert: 0 22 bbbbbbbbbbbb

--- Text Editor Menu ---
1. Insert text
2. Delete text
3. Cut text
4. Copy text
5. Paste text
6. Undo last command
7. Redo last command
8. View text
9. New Line
10. Exit
Enter the command you want to do: 8
Current Text
1: aaaaaaaaaaaaaaaaaabbbbbbbbbbb
2: bbbbbbbbbbbbbbbbbbbb

--- Text Editor Menu ---
1. Insert text
2. Delete text
3. Cut text
4. Copy text
5. Paste text
6. Undo last command
7. Redo last command
8. View text
9. New Line
10. Exit
Enter the command you want to do: |
```

Deleting characters does work without problems

```
C:\Users\bubli\OneDrive\Desl x + v
Enter line number, index and number of characters to delete: 0 0 15

--- Text Editor Menu ---
1. Insert text
2. Delete text
3. Cut text
4. Copy text
5. Paste text
6. Undo last command
7. Redo last command
8. View text
9. New Line
10. Exit
Enter the command you want to do: 8
Current Text
1: aaaaaaa
2: bbbbbbbbbbbbbbbbbbbb

--- Text Editor Menu ---
1. Insert text
2. Delete text
3. Cut text
4. Copy text
5. Paste text
6. Undo last command
7. Redo last command
8. View text
9. New Line
10. Exit
Enter the command you want to do: |
```

Delete option also allows you to remove all of the characters in the string

```
C:\Users\bubli\OneDrive\Desl  X + v
Enter line number, index and number of characters to delete: 0 0 22

--- Text Editor Menu ---
1. Insert text
2. Delete text
3. Cut text
4. Copy text
5. Paste text
6. Undo last command
7. Redo last command
8. View text
9. New line
10. Exit
Enter the command you want to do: 8
Current Text
1:
2: bbbbbbbbbbbbbbbbbbbbbbb

--- Text Editor Menu ---
1. Insert text
2. Delete text
3. Cut text
4. Copy text
5. Paste text
6. Undo last command
7. Redo last command
8. View text
9. New line
10. Exit
Enter the command you want to do: |
```

Deleting characters works in any string

```
C:\Users\bubli\OneDrive\Desl  X + v
Enter line number, index and number of characters to cut: 1 0 3

--- Text Editor Menu ---
1. Insert text
2. Delete text
3. Cut text
4. Copy text
5. Paste text
6. Undo last command
7. Redo last command
8. View text
9. New line
10. Exit
Enter the command you want to do: 8
Current Text
1: aaaaaaaaaaaaaaaaaaaaaa
2: bbbbbbbbbbbbbbbbbbbbb

--- Text Editor Menu ---
1. Insert text
2. Delete text
3. Cut text
4. Copy text
5. Paste text
6. Undo last command
7. Redo last command
8. View text
9. New line
10. Exit
Enter the command you want to do: |
```

Copy and paste works fine

```
C:\Users\bubli\OneDrive\Desl  X + v - □ X
end

--- Text Editor Menu ---
1. Insert text
2. Delete text
3. Cut text
4. Copy text
5. Paste text
6. Undo last command
7. Redo last command
8. View text
9. New line
10. Exit
Enter the command you want to do: 5
Enter line number and index to paste: 0 0

--- Text Editor Menu ---
1. Insert text
2. Delete text
3. Cut text
4. Copy text
5. Paste text
6. Undo last command
7. Redo last command
8. View text
9. New line
10. Exit
Enter the command you want to do: 8
Current Text
1: asdfasdfasdfasdfasdf
```

```
C:\Users\bubli\OneDrive\Desl  x + v - □ x
--- Text Editor Menu ---
1. Insert text
2. Delete text
3. Cut text
4. Copy text
5. Paste text
6. Undo last command
7. Redo last command
8. View text
9. New Line
10. Exit
Enter the command you want to do: 4
Enter line number, index and number of characters to copy: 0 0 3

--- Text Editor Menu ---
1. Insert text
2. Delete text
3. Cut text
4. Copy text
5. Paste text
6. Undo last command
7. Redo last command
8. View text
9. New Line
10. Exit
Enter the command you want to do: 5
Enter line number and index to paste: 0 0

--- Text Editor Menu ---
```

```
C:\Users\bubli\OneDrive\Desl  x + v - □ x
Enter the command you want to do: 5
Enter line number and index to paste: 0 0

--- Text Editor Menu ---
1. Insert text
2. Delete text
3. Cut text
4. Copy text
5. Paste text
6. Undo last command
7. Redo last command
8. View text
9. New Line
10. Exit
Enter the command you want to do: 8
Current Text
1: asdasdfffffffffffffffffffff

--- Text Editor Menu ---
1. Insert text
2. Delete text
3. Cut text
4. Copy text
5. Paste text
6. Undo last command
7. Redo last command
8. View text
9. New Line
10. Exit
Enter the command you want to do: |
```

Insert with replacement also works fine

```
C:\Users\publi\OneDrive\Desl X + v
hello
end

--- Text Editor Menu ---
1. Insert text
2. Delete text
3. Cut text
4. Copy text
5. Paste text
6. Undo last command
7. Redo last command
8. View text
9. New Line
10. Exit
Enter the command you want to do: 8
Current Text
1: hello

--- Text Editor Menu ---
1. Insert text
2. Delete text
3. Cut text
4. Copy text
5. Paste text
6. Undo last command
7. Redo last command
8. View text
9. New Line
10. Exit
Enter the command you want to do: 1|
```

```
C:\Users\publi\OneDrive\Desl X + v
Enter the command you want to do: 1
Enter line number, index and text to insert: 0 0 world

--- Text Editor Menu ---
1. Insert text
2. Delete text
3. Cut text
4. Copy text
5. Paste text
6. Undo last command
7. Redo last command
8. View text
9. New Line
10. Exit
Enter the command you want to do: 8
Current Text
1: world

--- Text Editor Menu ---
1. Insert text
2. Delete text
3. Cut text
4. Copy text
5. Paste text
6. Undo last command
7. Redo last command
8. View text
9. New Line
10. Exit
Enter the command you want to do: |
```

Problems arose with the undo (and redo, accordingly) methods - whenever the character is removed in the middle of the string, and then the operation is undone, the removed character overrides the character which originally was on the right of it.

```
C:\Users\bubli\OneDrive\Desl X + v - □ X

--- Text Editor Menu ---
1. Insert text
2. Delete text
3. Cut text
4. Copy text
5. Paste text
6. Undo last command
7. Redo last command
8. View text
9. New line
10. Exit
Enter the command you want to do: 9
Enter text to append (type 'end' on a new line to finish):
hello
end

--- Text Editor Menu ---
1. Insert text
2. Delete text
3. Cut text
4. Copy text
5. Paste text
6. Undo last command
7. Redo last command
8. View text
9. New line
10. Exit
Enter the command you want to do: |
```

```
C:\Users\bubli\OneDrive\Desl X + v - □ X

Enter text to append (type 'end' on a new line to finish):
hello
end

--- Text Editor Menu ---
1. Insert text
2. Delete text
3. Cut text
4. Copy text
5. Paste text
6. Undo last command
7. Redo last command
8. View text
9. New line
10. Exit
Enter the command you want to do: 3
Enter line number, index and number of characters to cut: 0 0 1

--- Text Editor Menu ---
1. Insert text
2. Delete text
3. Cut text
4. Copy text
5. Paste text
6. Undo last command
7. Redo last command
8. View text
9. New line
10. Exit
Enter the command you want to do: |
```

```
C:\Users\bubli\OneDrive\Desl X + v
Enter the command you want to do: 3
Enter line number, index and number of characters to cut: 0 0 1

--- Text Editor Menu ---
1. Insert text
2. Delete text
3. Cut text
4. Copy text
5. Paste text
6. Undo last command
7. Redo last command
8. View text
9. New line
10. Exit
Enter the command you want to do: 8
Current Text
1: ello

--- Text Editor Menu ---
1. Insert text
2. Delete text
3. Cut text
4. Copy text
5. Paste text
6. Undo last command
7. Redo last command
8. View text
9. New line
10. Exit
Enter the command you want to do: |
```

```
C:\Users\bubli\OneDrive\Desl X + v
10. Exit
Enter the command you want to do: 6

--- Text Editor Menu ---
1. Insert text
2. Delete text
3. Cut text
4. Copy text
5. Paste text
6. Undo last command
7. Redo last command
8. View text
9. New line
10. Exit
Enter the command you want to do: 8
Current Text
1: hllo

--- Text Editor Menu ---
1. Insert text
2. Delete text
3. Cut text
4. Copy text
5. Paste text
6. Undo last command
7. Redo last command
8. View text
9. New line
10. Exit
Enter the command you want to do: |
```