

Start a fresh terminal for this Lab and make a new directory called 'Lab8'.
Copy the 'Braincancer.csv' file to this directory. At the end of the lab, rename the data file as 'Braincancer Lab8.csv' and upload this to github as well.

(1) Open the data file using the VIM editor.

```
mv: cannot stat 'BrainCancer.csv': No such file or directory
ibab@IBAB-MSc-BDB-Comp06:~/Downloads/LAB8$ mv home/ibab/Downloads/LAB5/ BrainCancer.csv LAB8
mv: target 'LAB8' is not a directory
ibab@IBAB-MSc-BDB-Comp06:~/Downloads/LAB8$ mv home/ibab/Downloads/LAB5/ BrainCancer.csv
mv: cannot stat 'home/ibab/Downloads/LAB5/': No such file or directory
ibab@IBAB-MSc-BDB-Comp06:~/Downloads/LAB8$ ls
BrainCancer.csv
ibab@IBAB-MSc-BDB-Comp06:~/Downloads/LAB8$ vim BrainCancer.csv
ibab@IBAB-MSc-BDB-Comp06:~/Downloads/LAB8$
```

```
,sex,diagnosis,loc,ki,gtv,stereo,status,time
1,Female,Meningioma,Infratentorial,90,6.11,SRS,0,57.64
2,Male,HG glioma,Supratentorial,90,19.35,SRT,1,8.98
3,Female,Meningioma,Infratentorial,70,7.95,SRS,0,26.46
4,Female,LG glioma,Supratentorial,80,7.61,SRT,1,47.8
5,Male,HG glioma,Supratentorial,90,5.06,SRT,1,6.3
6,Female,Meningioma,Supratentorial,80,4.82,SRS,0,52.75
7,Male,Meningioma,Supratentorial,80,3.19,SRT,0,55.8
8,Male,LG glioma,Supratentorial,80,12.37,SRT,0,42.1
9,Female,Meningioma,Supratentorial,70,12.16,SRT,0,34.66
10,Male,HG glioma,Supratentorial,100,2.53,SRT,0,11.48
11,Male,LG glioma,Supratentorial,80,0.14,SRT,1,35.93
12,Female,Meningioma,Infratentorial,90,6.54,SRS,0,34.26
13,Female,Meningioma,Infratentorial,90,0.63,SRS,0,32.98
14,Male,NA,Supratentorial,90,6.38,SRT,0,50.85
15,Female,Meningioma,Supratentorial,60,9.18,SRT,0,41.44
16,Female,HG glioma,Supratentorial,70,11.38,SRS,1,7.05
17,Female,Other,Infratentorial,60,24,SRT,1,6.82
18,Male,HG glioma,Supratentorial,90,10.8,SRT,0,82.56
19,Male,Meningioma,Supratentorial,80,13.49,SRS,1,6.92
20,Female,Meningioma,Supratentorial,90,2.5,SRT,0,30.16
21,Female,Meningioma,Supratentorial,80,2.82,SRS,0,24.39
22,Male,HG glioma,Supratentorial,70,14.44,SRT,1,14
23,Female,Other,Infratentorial,80,2.11,SRS,0,10.49
24,Female,Meningioma,Infratentorial,100,2.13,SRS,1,51.02
25,Female,Meningioma,Supratentorial,70,6.48,SRT,1,33.41
26,Male,LG glioma,Supratentorial,90,4.23,SRT,1,25.02
27,Male,Other,Supratentorial,60,34.64,SRT,1,11.57
28,Male,HG glioma,Supratentorial,70,33.69,SRT,1,0.07
29,Male,Meningioma,Supratentorial,60,3.81,SRT,0,36.1
30,Female,Meningioma,Supratentorial,90,4.72,SRS,0,65.02
31,Female,LG glioma,Supratentorial,80,0.85,SRS,1,6.1
```

2. Move to the beginning of the file and insert the text: "VIM challenge begins!" on a new line at the very top.

```
,sex,diagnosis,loc,ki,gtv,stereo,status,time
VIM challenge begins!
1,Female,Meningioma,Infratentorial,90,6.11,SRS,0,57.64
2,Male,HG glioma,Supratentorial,90,19.35,SRT,1,8.98
3,Female,Meningioma,Infratentorial,70,7.95,SRS,0,26.46
4,Female,LG glioma,Supratentorial,80,7.61,SRT,1,47.8
5,Male,HG glioma,Supratentorial,90,5.06,SRT,1,6.3
6,Female,Meningioma,Supratentorial,80,4.82,SRS,0,52.75
7,Male,Meningioma,Supratentorial,80,3.19,SRT,0,55.8
8,Male,LG glioma,Supratentorial,80,12.37,SRT,0,42.1
9,Female,Meningioma,Supratentorial,70,12.16,SRT,0,34.66
10,Male,HG glioma,Supratentorial,100,2.53,SRT,0,11.48
11,Male,LG glioma,Supratentorial,80,0.14,SRT,1,35.93
12,Female,Meningioma,Infratentorial,90,6.54,SRS,0,34.26
13,Female,Meningioma,Infratentorial,90,0.63,SRS,0,32.98
14,Male,NA,Supratentorial,90,6.38,SRT,0,50.85
15,Female,Meningioma,Supratentorial,60,9.18,SRT,0,41.44
16,Female,HG glioma,Supratentorial,70,11.38,SRS,1,7.05
17,Female,Other,Infratentorial,60,24,SRT,1,6.82
18,Male,HG glioma,Supratentorial,90,10.8,SRT,0,82.56
19,Male,Meningioma,Supratentorial,80,13.49,SRS,1,6.92
20,Female,Meningioma,Supratentorial,90,2.5,SRT,0,30.16
21,Female,Meningioma,Supratentorial,80,2.82,SRS,0,24.39
22,Male,HG glioma,Supratentorial,70,14.44,SRT,1,14
23,Female,Other,Infratentorial,80,2.11,SRS,0,10.49
24,Female,Meningioma,Infratentorial,100,2.13,SRS,1,51.02
25,Female,Meningioma,Supratentorial,70,6.48,SRT,1,33.41
26,Male,LG glioma,Supratentorial,90,4.23,SRT,1,25.02
27,Male,Other,Supratentorial,60,34.64,SRT,1,11.57
28,Male,HG glioma,Supratentorial,70,33.69,SRT,1,0.07
29,Male,Meningioma,Supratentorial,60,3.81,SRT,0,36.1
30,Female,Meningioma,Supratentorial,90,4.72,SRS,0,65.02
```

3. Find the word 'Meningioma' and replace it with 'LG glioma'

```
35,Female,Lg glioma,Supratentorial,90,7.3,SRT,0,5.51
36,Female,Other,Supratentorial,70,14.26,SRT,0,7.18
37,Female,Lg glioma,Supratentorial,80,6.6,SRT,0,14.75
38,Male,HG glioma,Supratentorial,90,9.95,SRT,1,6.23
39,Male,Other,Infratentorial,80,12.51,SRT,1,29.7
40,Female,Lg glioma,Supratentorial,90,2.54,SRT,0,45.74
41,Female,Lg glioma,Supratentorial,80,1.57,SRT,0,2.03
42,Male,HG glioma,Supratentorial,90,0.28,SRT,1,16.43
43,Female,Lg glioma,Supratentorial,70,6.7,SRT,0,14.56
44,Male,Lg glioma,Supratentorial,80,12.63,SRT,1,4.16
45,Male,Other,Infratentorial,90,3.12,SRT,0,18.95
46,Male,Lg glioma,Supratentorial,60,7.09,SRS,1,31.25
47,Male,HG glioma,Supratentorial,80,29.27,SRT,0,5.15
48,Female,Lg glioma,Supratentorial,80,26.31,SRT,1,39.54
49,Male,Lg glioma,Supratentorial,70,0.97,SRT,1,1.41
50,Female,LG glioma,Supratentorial,80,0.19,SRS,0,11.51
51,Female,HG glioma,Supratentorial,90,0.04,SRT,0,31.67
52,Female,Lg glioma,Infratentorial,90,9.24,SRT,0,26.85
53,Male,HG glioma,Supratentorial,90,2.5,SRT,1,9.77
54,Male,Lg glioma,Infratentorial,80,24.41,SRT,0,39.54
55,Female,HG glioma,Supratentorial,80,0.63,SRT,1,16.92
56,Male,Other,Infratentorial,90,0.48,SRS,0,54.43
57,Male,HG glioma,Infratentorial,80,0.22,SRS,0,33.67
58,Male,HG glioma,Supratentorial,80,3.75,SRT,1,19.9
59,Female,Other,Supratentorial,80,11.83,SRT,1,22.03
60,Female,Lg glioma,Supratentorial,90,2.47,SRT,0,17.57
61,Female,HG glioma,Supratentorial,80,12.08,SRT,1,7.25
62,Male,Lg glioma,Supratentorial,80,11.51,SRT,1,14.62
63,Female,HG glioma,Supratentorial,40,22.87,SRT,1,3.38
64,Male,Lg glioma,Supratentorial,80,4.77,SRT,0,67.38
65,Male,LG glioma,Supratentorial,80,9.58,SRT,0,78.75
66,Female,Lg glioma,Supratentorial,100,4,SRT,0,52.23
67,Female,HG glioma,Supratentorial,80,7.59,SRT,1,4.56
68,Male,Other,Infratentorial,70,0.01,SRS,0,23.67
69,Female,Lg glioma,Supratentorial,80,6.93,SRS,0,10.1
70,Female,Lg glioma,Supratentorial,70,3.63,SRT,0,32.82
71,Male,Lg glioma,Supratentorial,70,8.45,SRT,0,19.41
72,Male,Lg glioma,Supratentorial,80,20.93,SRT,1,31.15
73,Male,LG glioma,Supratentorial,90,2.64,SRT,0,20.13
74,Female,HG glioma,Supratentorial,80,0.19,SRT,1,11.02
75,Male,Other,Supratentorial,100,24.91,SRT,0,19.74
```

4. Delete the entire line containing the time column entry '34.66'

```
8, Male, LG glioma, Supratentorial, 80, 12.37, SRT, 0, 42.1
10, Male, HG glioma, Supratentorial, 100, 2.53, SRT, 0, 11.48
```

5. Copy the current line and paste it two lines below. Show the screenshot before and after pasting with file line numbers to prove that you did it correctly.

```
2, Male, HG glioma, Supratentorial, 90, 19.35, SRT, 1, 8.98
3, Female, Lg glioma, Infratentorial, 70, 7.95, SRS, 0, 26.46
4, Female, LG glioma, Supratentorial, 80, 7.61, SRT, 1, 47.8
5, Male, HG glioma, Supratentorial, 90, 5.06, SRT, 1, 6.3
2, Male, HG glioma, Supratentorial, 90, 19.35, SRT, 1, 8.98
```

6. Move to the 11th line of this file and insert "Hello from line 11!"

```
8 7, Male, Lg glioma, Supratentorial, 80, 5.19, SRT, 0, 35.8
9 8, Male, LG glioma, Supratentorial, 80, 12.37, SRT, 0, 42.1
10 10, Male, HG glioma, Supratentorial, 100, 2.53, SRT, 0, 11.48
11 Hello from line 11!
12 11, Male, LG glioma, Supratentorial, 80, 0.14, SRT, 1, 35.93
13 12, Female, Lg glioma, Infratentorial, 90, 6.54, SRS, 0, 34.26
```


7. Search for the word 'SRT' and replace it with 'SRS' (all occurrences in the file)

```
43 43,Female,Lg glioma,Supratentorial,70,6.7,SRS,0,14.56
44 44,Male,Lg glioma,Supratentorial,80,12.63,SRS,1,4.16
45 45,Male,Other,Infratentorial,90,3.12,SRS,0,18.95
46 46,Male,Lg glioma,Supratentorial,60,7.09,SRS,1,31.25
47 47,Male,HG glioma,Supratentorial,80,29.27,SRS,0,5.15
48 48,Female,Lg glioma,Supratentorial,80,26.31,SRS,1,39.54
49 49,Male,Lg glioma,Supratentorial,70,0.97,SRS,1,1.41
50 50,Female,LG glioma,Supratentorial,80,0.19,SRS,0,11.51
51 51,Female,HG glioma,Supratentorial,90,0.04,SRS,0,31.67
52 52,Female,Lg glioma,Infratentorial,90,9.24,SRS,0,26.85
53 53,Male,HG glioma,Supratentorial,90,2.5,SRS,1,9.77
54 54,Male,Lg glioma,Infratentorial,80,24.41,SRS,0,39.54
55 55,Female,HG glioma,Supratentorial,80,0.63,SRS,1,16.92
56 56,Male,Other,Infratentorial,90,0.48,SRS,0,54.43
57 57,Male,HG glioma,Infratentorial,80,0.22,SRS,0,33.67
58 58,Male,HG glioma,Supratentorial,80,3.75,SRS,1,19.9
59 59,Female,Other,Supratentorial,80,11.83,SRS,1,22.03
60 60,Female,Lg glioma,Supratentorial,90,2.47,SRS,0,17.57
61 61,Female,HG glioma,Supratentorial,80,12.08,SRS,1,7.25
62 62,Male,Lg glioma,Supratentorial,80,11.51,SRS,1,14.62
63 63,Female,HG glioma,Supratentorial,40,22.87,SRS,1,3.38
64 64,Male,Lg glioma,Supratentorial,80,4.77,SRS,0,67.38
65 65,Male,LG glioma,Supratentorial,80,9.58,SRS,0,78.75
66 66,Female,Lg glioma,Supratentorial,100,4,SRS,0,52.23
67 67,Female,HG glioma,Supratentorial,80,7.59,SRS,1,4.56
68 68,Male,Other,Infratentorial,70,0.01,SRS,0,23.67
69 69,Female,Lg glioma,Supratentorial,80,6.93,SRS,0,10.1
70 70,Female,Lg glioma,Supratentorial,70,3.63,SRS,0,32.82
71 71,Male,Lg glioma,Supratentorial,70,8.45,SRS,0,19.41
72 72,Male,Lg glioma,Supratentorial,80,20.93,SRS,1,31.15
73 73,Male,LG glioma,Supratentorial,90,2.64,SRS,0,20.13
74 74,Female,HG glioma,Supratentorial,80,0.19,SRS,1,11.02
75 75,Male,Other,Supratentorial,100,24.91,SRS,0,19.74
76 76,Female,Lg glioma,Supratentorial,80,31.74,SRS,0,57.25
77 77,Female,Lg glioma,Supratentorial,80,2.39,SRS,0,73.74
78 78,Female,Lg glioma,Supratentorial,90,7.26,SRS,0,49.05
79 79,Female,Lg glioma,Supratentorial,100,9.66,SRS,0,39.25
80 80,Female,Lg glioma,Infratentorial,70,2.94,SRS,0,1.54
81 81,Female,HG glioma,Supratentorial,80,15.45,SRS,1,46.16
82 82,Female,Other,Supratentorial,90,1.82,SRS,0,47.11
83 83,Male,LG glioma,Infratentorial,90,30.41,SRS,0,1.18
```

8. Yank the first 3 lines of the file and paste them at the bottom

```
89 sex,diagnosis,loc,ki,gtv,ster eo,status,time
90 1,Female,Lg glioma,Infratentorial,90,6.11,SRS,0,57.64
91 2,Male,HG glioma,Supratentorial,90,19.35,SRS,1,8.98
```

9.

Visually select this entire instructions list and indent it by two spaces.

```
1 sex,diagnosis,loc,ki,gtv,ster eo,status,time
2 1,Female,Lg glioma,Infratentorial,90,6.11,SRS,0,57.64
3 2,Male,HG glioma,Supratentorial,90,19.35,SRT,1,8.98
4 3,Female,Lg glioma,Infratentorial,70,7.95,SRS,0,26.46
5 4,Female,LG glioma,Supratentorial,80,7.61,SRT,1,47.8
6 5,Male,HG glioma,Supratentorial,90,5.06,SRT,1,6.3
7 6,Female,Lg glioma,Supratentorial,80,4.82,SRS,0,52.75
8 7,Male,Lg glioma,Supratentorial,80,3.19,SRT,0,55.8
9 8,Male,LG glioma,Supratentorial,80,12.37,SRT,0,42.1
10 10,Male,HG glioma,Supratentorial,100,2.53,SRT,0,11.48
11 11,Male,LG glioma,Supratentorial,80,0.14,SRT,1,35.93
12 12,Female,Lg glioma,Infratentorial,90,6.54,SRS,0,34.26
13 13,Female,Lg glioma,Infratentorial,90,0.63,SRS,0,32.98
14 14,Male,NA,Supratentorial,90,6.38,SRT,0,50.85
15 15,Female,Lg glioma,Supratentorial,60,9.18,SRT,0,41.44
16 16,Female,HG glioma,Supratentorial,70,11.38,SRS,1,7.05
17 17,Female,Other,Infratentorial,60,24,SRT,1,6.82
18 18,Male,HG glioma,Supratentorial,90,10.8,SRT,0,82.56
19 19,Male,Lg glioma,Supratentorial,80,13.49,SRS,1,6.92
20 20,Female,Lg glioma,Supratentorial,90,2.5,SRT,0,30.16
21 21,Female,Lg glioma,Supratentorial,80,2.82,SRS,0,24.39
22 22,Male,HG glioma,Supratentorial,70,14.44,SRT,1,14
23 23,Female,Other,Infratentorial,80,2.11,SRS,0,10.49
24 24,Female,Lg glioma,Infratentorial,100,2.13,SRS,1,51.02
25 25,Female,Lg glioma,Supratentorial,70,6.48,SRT,1,33.41
26 26,Male,LG glioma,Supratentorial,90,4.23,SRT,1,25.02
27 27,Male,Other,Supratentorial,60,34.64,SRT,1,11.57
28 28,Male,HG glioma,Supratentorial,70,33.69,SRT,1,0.07
29 29,Male,Lg glioma,Supratentorial,60,3.81,SRT,0,36.1
30 30,Female,Lg glioma,Supratentorial,90,4.72,SRS,0,65.02
31 31,Female,LG glioma,Supratentorial,80,0.85,SRS,1,6.1
32 32,Male,Lg glioma,Supratentorial,90,2.56,SRS,0,44.39
33 33,Female,Other,Infratentorial,70,13.45,SRT,1,10.82
34 34,Male,Other,Infratentorial,80,6.81,SRS,0,57.11
35 35,Female,Lg glioma,Supratentorial,90,7.3,SRT,0,5.51
36 36,Female,Other,Supratentorial,70,14.26,SRT,0,7.18
37 37,Female,Lg glioma,Supratentorial,80,6.6,SRT,0,14.75
38 38,Male,HG glioma,Supratentorial,90,9.95,SRT,1,6.23
39 39,Male,Other,Infratentorial,80,12.51,SRT,1,29.7
40 40,Female,Lg glioma,Supratentorial,90,2.54,SRT,0,45.74
41 41,Female,Lg glioma,Supratentorial,80,1.57,SRT,0,2.03
42 42,Male,HG glioma,Supratentorial,90,0.28,SRT,1,16.43
43 43,Female,Lg glioma,Supratentorial,70,6.7,SRT,0,14.56
44 44,Male,Lg glioma,Supratentorial,80,12.63,SRT,1,4.16
45 45,Male,Other,Infratentorial,90,3.12,SRT,0,18.95
46 46,Male,Lg glioma,Supratentorial,60,7.09,SRS,1,31.25
47 47,Male,HG glioma,Supratentorial,80,29.27,SRT,0,5.15
48 48,Female,Lg glioma,Supratentorial,80,26.31,SRT,1,39.54
49 49,Male,Lg glioma,Supratentorial,70,0.97,SRT,1,1.41
50 50,Female,LG glioma,Supratentorial,80,0.19,SRS,0,11.51
51 51,Female,HG glioma,Supratentorial,90,0.04,SRT,0,31.67
52 52,Female,Lg glioma,Infratentorial,90,9.24,SRT,0,26.85
53 53,Male,HG glioma,Supratentorial,90,2.5,SRT,1,9.77
54 54,Male,Lg glioma,Infratentorial,80,24.41,SRT,0,39.54
```

10. Go to the 50th line number, and insert the following text: “ The cat sat on the mat. Another cat was watching. The cat did not move.” Replace all occurrences of the word “cat” with ”tiger”.

```
49 48,Female,Meningioma,Supratentorial,80,26.31,SRT,1,39.54
50 The cat sat on the mat. Another cat was watching. The cat did not move
51 49,Male,Meningioma,Supratentorial,70,0.97,SRT,1,1.41
52 50,Female,LG glioma,Supratentorial,80,0.19,SRS,0,11.51
53 51,Female,HG glioma,Supratentorial,90,0.04,SRT,0,31.67
54 52,Female,Meningioma,Infratentorial,90,9.24,SRT,0,26.85
55 53,Male,HG glioma,Supratentorial,90,2.5,SRT,1,9.77
56 54,Male,Meningioma,Infratentorial,80,24.41,SRT,0,39.54
```

```
49 48,Female,Meningioma,Supratentorial,80,26.31,SRT,1,39.54
50 The tiger sat on the mat. Another tiger was watching. The tiger did not move
51 49,Male,Meningioma,Supratentorial,70,0.97,SRT,1,1.41
52 50,Female,LG glioma,Supratentorial,80,0.19,SRS,0,11.51
53 51,Female,HG glioma,Supratentorial,90,0.04,SRT,0,31.67
54 52,Female,Meningioma,Infratentorial,90,9.24,SRT,0,26.85
55 53,Male,HG glioma,Supratentorial,90,2.5,SRT,1,9.77
56 54,Male,Meningioma,Infratentorial,80,24.41,SRT,0,39.54
3 substitutions on 1 line
```

11. Insert the text “This is an important reminder for you.” at 70th line number. Then change the word ‘important’ to ‘critical’. Describe the sequence of keystrokes used in full.

```
68 66,Female,Meningioma,Supratentorial,100,4,SRT,0,52.23
69 67,Female,HG glioma,Supratentorial,80,7.59,SRT,1,4.56
70 This is an important reminder for you.
71 68,Male,Other,Infratentorial,70,0.01,SRS,0,23.67
72 69,Female,Meningioma,Supratentorial,80,6.93,SRS,0,10.1
73 70,Female,Meningioma,Supratentorial,70,3.63,SRT,0,32.82
74 71,Male,Meningioma,Supratentorial,70,8.45,SRT,0,19.41
75 72,Male,Meningioma,Supratentorial,80,20.93,SRT,1,31.15
```

```
68 66,Female,Meningioma,Supratentorial,100,4,SRT,0,52.23
69 67,Female,HG glioma,Supratentorial,80,7.59,SRT,1,4.56
70 This is an critical reminder for you.
71 68,Male,Other,Infratentorial,70,0.01,SRS,0,23.67
72 69,Female,Meningioma,Supratentorial,80,6.93,SRS,0,10.1
73 70,Female,Meningioma,Supratentorial,70,3.63,SRT,0,32.82
74 71,Male,Meningioma,Supratentorial,70,8.45,SRT,0,19.41
75 72,Male,Meningioma,Supratentorial,80,20.93,SRT,1,31.15
:%s/important/critical
```

12. Note down the current line number, jump to the end of the file and jump back to this line without scrolling through every line. Describe the sequence of keystrokes used in full.

Ans: Current line number is 79

Shift +G to shift to the end of the last line

Press:79 back to same line number

13. Add the following sentence at the end of the file: "The quick brown fox (who was very quick) jumps over the lazy dog." Delete the text inside the parentheses (including the parentheses) in the following text. Describe the sequence of keystrokes used in full.

```
85 82,Female,Other,Supratentorial,90,1.82,SRT,0,47.11
86 83,Male,LG glioma,Infratentorial,90,30.41,SRT,0,1.18
87 84,Male,HG glioma,Supratentorial,80,0.16,SRT,1,20.69
88 85,Male,HG glioma,Supratentorial,80,19.81,SRT,1,6.39
89 86,Male,Meningioma,Supratentorial,90,2.5,SRT,0,32.82
90 87,Male,Meningioma,Supratentorial,90,2.02,SRS,0,42.07
91 88,Male,Other,Infratentorial,80,0.11,SRT,0,13.9
92 the quick brown fox jumps over the lazy dog.
: %s/(who was very quick)
```

14. Go to the last line of the file and append: "-- end of challenge"

```
85 82,Female,Other,Supratentorial,90,1.82,SRT,0,47.11
86 83,Male,LG glioma,Infratentorial,90,30.41,SRT,0,1.18
87 84,Male,HG glioma,Supratentorial,80,0.16,SRT,1,20.69
88 85,Male,HG glioma,Supratentorial,80,19.81,SRT,1,6.39
89 86,Male,Meningioma,Supratentorial,90,2.5,SRT,0,32.82
90 87,Male,Meningioma,Supratentorial,90,2.02,SRS,0,42.07
91 88,Male,Other,Infratentorial,80,0.11,SRT,0,13.9
92 the quick brown fox jumps over the lazy dog. end of the challenge
```

15. In the remaining exercises, we are going to use Vim's search, replace, visual modes and text objects. Open the file vim_cleanup_exercises.txt and do the following. Describe the sequence of keystrokes fully for each problem.

- (i) Fix spacing issues in the text in the lines 1-3.
- (ii) Fix any capitalization and typographical errors in lines 5-8.
- (iii) Correct punctuation errors in lines 10-13.
- (iv) Remove unwanted words in lines 15-17.
- (v) Fix alignment issues in lines 19-22.

```
This line has too many spaces.
Replace tabs with single spaces.
This line starts with too many spaces.
```

```
The quick brown fox jumps ovr the lazy dog.
Vim is a amazing text editor.
I enjoy learning vim.
Python is fun but also challenging.
```

```
Hello world! This sentence needs a period.
What is your name?
Yes, I like apples.
Wait! These are too many dots.
```



```
-----  
I really just want to say that this is fine.  
Please delete the word TODO anywhere it appears.  
I will fix this line.
```

Name	Age	City
Alice	24	New York
Bob	32	Los Angeles
Charlie	19	Chicago