

For this lab, download 'BrainCancer.csv' to a folder called 'Lab5'. If the file download to the "Downloads" folder by default, move the file to the folder 'Lab5'.  
The data file contains the following columns for the survival times of patients diagnosed with brain cancer.

```
ibab@IBAB-MSc-BDB-Comp06:~/Downloads$ mkdir LAB5
ibab@IBAB-MSc-BDB-Comp06:~/Downloads$ mv BrainCancer.csv LAB5
ibab@IBAB-MSc-BDB-Comp06:~/Downloads$ ls -l
total 144
drwxrwxrwx 83 ibab ibab 4096 Jul 22 16:59 etc_learn
-rw-rw-r-- 1 ibab ibab 96755 Jul 24 16:19 etc.zip
-rw-rw-r-- 1 ibab ibab 24 Jul 31 09:30 file1
-rw-rw-r-- 1 ibab ibab 24 Jul 31 09:32 'file1(1)'
-rw-rw-r-- 1 ibab ibab 23 Jul 31 09:31 file2
-rw-rw-r-- 1 ibab ibab 48 Jul 31 09:31 file3
-rw-rw-r-- 1 ibab ibab 48 Jul 31 09:41 file3_sorted
-rw-rw-r-- 1 ibab ibab 10240 Aug 1 14:46 heart1.tar
-rw-rw-r-- 1 ibab ibab 45 Aug 1 14:42 Heart.tar.gz
drwxrwxr-x 2 ibab ibab 4096 Jul 31 17:05 LAB4
drwxrwxr-x 2 ibab ibab 4096 Aug 1 15:25 LAB5
-rw-rw-r-- 1 ibab ibab 0 Jul 23 09:47 testfile
-rw-rw-r-- 1 ibab ibab 0 Jul 23 09:47 testfile2
-rw-rw-r-- 1 ibab ibab 0 Jul 23 09:47 testfile-slink
ibab@IBAB-MSc-BDB-Comp06:~/Downloads$ cd LAB5
ibab@IBAB-MSc-BDB-Comp06:~/Downloads/LAB5$ ls -l
total 8
-rw-rw-r-- 1 ibab ibab 4843 Aug 1 15:23 BrainCancer.csv
ibab@IBAB-MSc-BDB-Comp06:~/Downloads/LAB5$
```

1. Look for the pattern 'Meningioma' in the data file. Redirect the output to a new file called 'LinesWithMeningioma.out'. Show the command used and the contents of this new file in your screenshot.

```
ibab@IBAB-MSc-BDB-Comp06:~/Downloads/LAB5$ grep 'Meningioma' BrainCancer.csv > LinesWithMeningioma.out
ibab@IBAB-MSc-BDB-Comp06:~/Downloads/LAB5$ cat LinesWithMeningioma.out
1,Female,Meningioma,Infratentorial,90,6.11,SRS,0,57.64
3,Female,Meningioma,Infratentorial,70,7.95,SRS,0,26.46
6,Female,Meningioma,Supratentorial,80,4.82,SRS,0,52.75
7,Male,Meningioma,Supratentorial,80,3.19,SRT,0,55.8
9,Female,Meningioma,Supratentorial,70,12.16,SRT,0,34.66
12,Female,Meningioma,Infratentorial,90,6.54,SRS,0,34.26
13,Female,Meningioma,Infratentorial,90,0.63,SRS,0,32.98
15,Female,Meningioma,Supratentorial,60,9.18,SRT,0,41.44
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
24,Female,Meningioma,Infratentorial,100,2.13,SRS,1,51.02
25,Female,Meningioma,Supratentorial,70,6.48,SRT,1,33.41
29,Male,Meningioma,Supratentorial,60,3.81,SRT,0,36.1
30,Female,Meningioma,Supratentorial,90,4.72,SRS,0,65.02
32,Male,Meningioma,Supratentorial,90,2.56,SRS,0,44.39
35,Female,Meningioma,Supratentorial,90,7.3,SRT,0,5.51
37,Female,Meningioma,Supratentorial,80,6.6,SRT,0,14.75
40,Female,Meningioma,Supratentorial,90,2.54,SRT,0,45.74
41,Female,Meningioma,Supratentorial,80,1.57,SRT,0,2.03
43,Female,Meningioma,Supratentorial,70,6.7,SRT,0,14.56
44,Male,Meningioma,Supratentorial,80,12.63,SRT,1,4.16
46,Male,Meningioma,Supratentorial,60,7.09,SRS,1,31.25
48,Female,Meningioma,Supratentorial,80,26.31,SRT,1,39.54
49,Male,Meningioma,Supratentorial,70,0.97,SRT,1,1.41
52,Female,Meningioma,Infratentorial,90,9.24,SRT,0,26.85
54,Male,Meningioma,Infratentorial,80,24.41,SRT,0,39.54
60,Female,Meningioma,Supratentorial,90,2.47,SRT,0,17.57
62,Male,Meningioma,Supratentorial,80,11.51,SRT,1,14.62
64,Male,Meningioma,Supratentorial,80,4.77,SRT,0,67.38
66,Female,Meningioma,Supratentorial,100,4,SRT,0,52.23
69,Female,Meningioma,Supratentorial,80,6.93,SRS,0,10.1
70,Female,Meningioma,Supratentorial,70,3.63,SRT,0,32.82
71,Male,Meningioma,Supratentorial,70,8.45,SRT,0,19.41
72,Male,Meningioma,Supratentorial,80,20.93,SRT,1,31.15
76,Female,Meningioma,Supratentorial,80,31.74,SRT,0,57.25
77,Female,Meningioma,Supratentorial,80,2.39,SRS,0,73.74
78,Female,Meningioma,Supratentorial,90,7.26,SRT,0,49.05
79,Female,Meningioma,Supratentorial,100,9.66,SRT,0,39.25
80,Female,Meningioma,Infratentorial,70,2.94,SRS,0,1.54
86,Male,Meningioma,Supratentorial,90,2.5,SRT,0,32.82
87,Male,Meningioma,Supratentorial,90,2.02,SRS,0,42.07
```

2. How many males and females were present in this study? How will you create a grep filter to find this out?