1)

```
ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ grep Meningioma BrainCancer.csv
1,Female,Meningion
                   Infratentorial,90,6.11,SRS,0,57.64,
                    ,Infratentorial,70,7.95,SRS,0,26.46
3, Female,
6, Female,
                    ,Supratentorial,80,4.82,SRS,0,52.75
                 ,Supratentorial,80,3.19,SRT,0,55.8
7,Male,
                    ,Supratentorial,70,12.16,SRT,0,34.66
9.Female.M
12, Female,
                     ,Infratentorial,90,6.54,SRS,0,34.26
                     ,Infratentorial,90,0.63,SRS,0,32.98
13, Female,
15, Female,
                     ,Supratentorial,60,9.18,SRT,0,41.44
                   ,Supratentorial,80,13.49,SRS,1,6.92
19, Male,
20, Female,
                     ,Supratentorial,90,2.5,SRT,0,30.16
21, Female,
                     ,Supratentorial,80,2.82,SRS,0,24.39
                     ,Infratentorial,100,2.13,SRS,1,51.02
24.Female.
25, Female,
                     ,Supratentorial,70,6.48,SRT,1,33.41
29, Male,
                   ,Supratentorial,60,3.81,SRT,0,36.1
                     ,Supratentorial,90,4.72,SRS,0,65.02
30, Female,
                   Supratentorial,90,2.56,SRS,0,44.39,
32, Male,
35, Female,
                     ,Supratentorial,90,7.3,SRT,0,5.51
```

```
ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ grep Meningioma BrainCancer.csv > LinesWithMeningoma.out
ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ cat LinesWithMeningoma.out
1,Female,Meningioma,Infratentorial,90,6.11,SRS,0,57.64
3,Female,Meningioma,Supratentorial,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
```

2)

```
ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ grep -c Male BrainCancer.csv
43
ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ grep -c Female BrainCancer.csv
45
```

```
ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ grep Supratentorial BrainCancer.csv > supratentorialsorted.out
ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ grep -c Male supratentorialsorted.out
34
```

```
ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ grep -i infratentorial BrainCancer.csv > infratentorialsorted.out
ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ grep -ci female infratentorialsorted.out
10
ibab@IBAB-Workshop-Comp005: /Downloads/Lab5$
```

4) 4 people have the lowest ki value which is equal to 60

```
ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ sort -t ',' -k5 -n BrainCancer.csv
,sex,diagnosis,loc,ki,gtv,stereo,status,time
29,Male,Meningioma,Supratentorial,60,3.81,SRT,0,36.1
46,Male,Meningioma,Supratentorial,60,7.09,SRS,1,31.25
15,Female,Meningioma,Supratentorial,60,9.18,SRT,0,41.44
```

5)

```
ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ grep SRS BrainCancer.csv > SRSsorted.out
ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ grep -e Infratentorial SRSsorted.out
1,Female,Meningioma,I
                                     tal,90,6.11,SRS,0,57.64
3,Female,Meningioma,
                                        ,70,7.95,SRS,0,26.46
12, Female, Meningioma,
                                         ,90,6.54,SRS,0,34.26
13,Female,Meningioma,
                                         ,90,0.63,SRS,0,32.98
23, Female, Other,
                                 al,80,2.11,SRS,0,10.49
                                         ,100,2.13,SRS,1,51.02
24, Female, Meningioma,
34, Male, Other,
                                 ,80,6.81,SRS,0,57.11
56, Male, Other,
                                 ,90,0.48,SRS,0,54.43
57, Male, HG glioma, 1
                                      ,80,0.22,SRS,0,33.67
                                 ,70,0.01,SRS,0,23.67
68, Male, Other,
80, Female, Meningioma, I
                                         ,70,2.94,SRS,0,1.54
ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ grep -e Infratentorial -c SRSsorted.out
11
```

```
ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ sort -t "," -k 9 -n -r BrainCancer.csv
18,Male,HG glioma,Supratentorial,90,10.8,SRT,0,82.56
65,Male,LG glioma,Supratentorial,80,9.58,SRT,0,78.75
77,Female,Meningioma,Supratentorial,80,2.39,SRS,0,73.74
64,Male,Meningioma,Supratentorial,80,4.77,SRT,0,67.38
30,Female,Meningioma,Supratentorial,90,4.72,SRS,0,65.02
1,Female,Meningioma,Infratentorial,90,6.11,SRS,0,57.64
76,Female,Meningioma,Supratentorial,80,31.74,SRT,0,57.25
34,Male,Other,Infratentorial,80,6.81,SRS,0,57.11
7,Male,Meningioma,Supratentorial,80,3.19,SRT,0,55.8
56,Male,Other,Infratentorial,90,0.48,SRS,0,54.43
6,Female,Meningioma,Supratentorial,80,4.82,SRS,0,52.75
66,Female,Meningioma,Supratentorial,100,4,SRT,0,52.23
24,Female,Meningioma,Infratentorial,100,2.13,SRS,1,51.02
14,Male,NA,Supratentorial,90,6.38,SRT,0,50.85
```

```
ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ sort -t "," -k 9 -n -r BrainCancer.csv -o months.out
ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ head -n14 months.out
18,Male,HG glioma,Supratentorial,90,10.8,SRT,0,82.56
65,Male,LG glioma,Supratentorial,80,9.58,SRT,0,78.75
77,Female,Meningioma,Supratentorial,80,4.77,SRT,0,67.38
30,Female,Meningioma,Supratentorial,90,4.77,SRT,0,67.38
30,Female,Meningioma,Infratentorial,90,4.17,SRS,0,57.64
76,Female,Meningioma,Supratentorial,80,31.74,SRT,0,57.25
34,Male,Other,Infratentorial,80,6.81,SRS,0,57.11
7,Male,Meningioma,Supratentorial,80,3.19,SRT,0,55.8
56,Male,Other,Infratentorial,90,0.48,SRS,0,54.43
6,Female,Meningioma,Supratentorial,80,4.82,SRS,0,52.75
66,Female,Meningioma,Supratentorial,100,4,SRT,0,52.23
24,Female,Meningioma,Infratentorial,100,2.13,SRS,1,51.02
14,Male,NA,Supratentorial,90,6.38,SRT,0,50.85
```

7) only 1 person has HG glioma who has survival times more than 50 months.

```
ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ grep "HG glioma" months.out
18,Male,HG glioma,Supratentorial,90,10.8,SRT,0,82.56
81,Female,HG glioma,Supratentorial,80,15.45,SRT,1,46.16
57,Male,HG glioma,Infratentorial,80,0.22,SRS,0,33.67
51,Female,HG glioma,Supratentorial,90,0.04,SRT,0,31.67
```

8)

tbab@IBAB-Workshop-Comp005:~/Downloads/Lab5\$ sort -t "," -k 9 -n BrainCancer.csv -o lessthan30months.out

```
ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ head -50 lessthan30months.out
,sex,diagnosis,loc,ki,gtv,stereo,status,time
28, Male, HG glioma, Supratentorial, 70, 33.69, SRT, 1, 0.07
83, Male, LG glioma, Infratentorial, 90, 30.41, SRT, 0, 1.18
49, Male, Meningioma, Supratentorial, 70, 0.97, SRT, 1, 1.41
80, Female, Meningioma, Infratentorial, 70, 2.94, SRS, 0, 1.54
41, Female, Meningioma, Supratentorial, 80, 1.57, SRT, 0, 2.03
63, Female, HG glioma, Supratentorial, 40, 22.87, SRT, 1, 3.38
44, Male, Meningioma, Supratentorial, 80, 12.63, SRT, 1, 4.16
67, Female, HG glioma, Supratentorial, 80, 7.59, SRT, 1, 4.56
47, Male, HG glioma, Supratentorial, 80, 29.27, SRT, 0, 5.15
35, Female, Meningioma, Supratentorial, 90, 7.3, SRT, 0, 5.51
31,Female,LG glioma,Supratentorial,80,0.85,SRS,1,6.1
38, Male, HG glioma, Supratentorial, 90, 9.95, SRT, 1, 6.23
5, Male, HG glioma, Supratentorial, 90, 5.06, SRT, 1, 6.3
85, Male, HG glioma, Supratentorial, 80, 19.81, SRT, 1, 6.39
17, Female, Other, Infratentorial, 60, 24, SRT, 1, 6.82
19, Male, Meningioma, Supratentorial, 80, 13.49, SRS, 1, 6.92
16, Female, HG glioma, Supratentorial, 70, 11.38, SRS, 1, 7.05
36, Female, Other, Supratentorial, 70, 14.26, SRT, 0, 7.18
61, Female, HG glioma, Supratentorial, 80, 12.08, SRT, 1, 7.25
2, Male, HG glioma, Supratentorial, 90, 19.35, SRT, 1, 8.98
53, Male, HG glioma, Supratentorial, 90, 2.5, SRT, 1, 9.77
69, Female, Meningioma, Supratentorial, 80, 6.93, SRS, 0, 10.1
23, Female, Other, Infratentorial, 80, 2.11, SRS, 0, 10.49
33, Female, Other, Infratentorial, 70, 13.45, SRT, 1, 10.82
74, Female, HG glioma, Supratentorial, 80, 0.19, SRT, 1, 11.02
10, Male, HG glioma, Supratentorial, 100, 2.53, SRT, 0, 11.48
50, Female, LG glioma, Supratentorial, 80, 0.19, SRS, 0, 11.51
27, Male, Other, Supratentorial, 60, 34.64, SRT, 1, 11.57
88, Male, Other, Infratentorial, 80, 0.11, SRT, 0, 13.9
22, Male, HG glioma, Supratentorial, 70, 14.44, SRT, 1, 14
43, Female, Meningioma, Supratentorial, 70, 6.7, SRT, 0, 14.56
62, Male, Meningioma, Supratentorial, 80, 11.51, SRT, 1, 14.62
37, Female, Meningioma, Supratentorial, 80, 6.6, SRT, 0, 14.75
42, Male, HG glioma, Supratentorial, 90, 0.28, SRT, 1, 16.43
55, Female, HG glioma, Supratentorial, 80, 0.63, SRT, 1, 16.92
60, Female, Meningioma, Supratentorial, 90, 2.47, SRT, 0, 17.57
45, Male, Other, Infratentorial, 90, 3.12, SRT, 0, 18.95
71, Male, Meningioma, Supratentorial, 70, 8.45, SRT, 0, 19.41
75, Male, Other, Supratentorial, 100, 24.91, SRT, 0, 19.74
58, Male, HG glioma, Supratentorial, 80, 3.75, SRT, 1, 19.9
73, Male, LG glioma, Supratentorial, 90, 2.64, SRT, 0, 20.13
84, Male, HG glioma, Supratentorial, 80, 0.16, SRT, 1, 20.69
59, Female, Other, Supratentorial, 80, 11.83, SRT, 1, 22.03
68, Male, Other, Infratentorial, 70, 0.01, SRS, 0, 23.67
21, Female, Meningioma, Supratentorial, 80, 2.82, SRS, 0, 24.39
26, Male, LG glioma, Supratentorial, 90, 4.23, SRT, 1, 25.02
3, Female, Meningioma, Infratentorial, 70, 7.95, SRS, 0, 26.46
52, Female, Meningioma, Infratentorial, 90, 9.24, SRT, 0, 26.85
39, Male, Other, Infratentorial, 80, 12.51, SRT, 1, 29.7
```

```
ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ head -50 lessthan30months.out > 30months.out
ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ grep -i Supratentorial 30months.out
                                ial,70,33.69,SRT,1,0.07
28, Male, HG glioma,
                                    ,70,0.97,SRT,1,1.41
49,Male,Meningioma,
41, Female, Meningioma,
                                      ,80,1.57,SRT,0,2.03
                                    1,40,22.87,SRT,1,3.38
,80,12.63,SRT,1,4.16
63,Female,HG glioma,S
44, Male, Meningioma, S
                                     1,80,7.59,SRT,1,4.56
67, Female, HG glioma,
47,Male,HG glioma,S
                                   ,80,29.27,SRT,0,5.15
                                       ,90,7.3,SRT,0,5.51
35, Female, Meningioma,
31,Female,LG glioma,
38,Male,HG glioma,Su
                                      ,80,0.85,SRS,1,6.1
                                    ,90,9.95,SRT,1,6.23
5,Male,HG glioma,
                                  ,90,5.06,SRT,1,6.3
85, Male, HG glioma,
                                   ,80,19.81,SRT,1,6.39
                                    1,80,13.49,SRS,1,6.92
19,Male,Meningioma,
```

```
ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ grep -i Supratentorial 30months.out > supratentorial30months.out
ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ grep -i "LG glioma" supratentorial30months.out
31,Female,LG glioma,Supratentorial,80,0.85,SRS,1,6.1
50,Female,LG glioma,Supratentorial,80,0.19,SRS,0,11.51
73,Male,LG glioma,Supratentorial,90,2.64,SRT,0,20.13
26,Male,LG glioma,Supratentorial,90,4.23,SRT,1,25.02
ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ grep -ci "LG glioma" supratentorial30months.out
4
```

9)grep is case sensitive, -i can be used to ignore case sensitivity

```
ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ grep -i female BrainCancer.csv
1,Female,Meningioma,Infratentorial,90,6.11,SRS,0,57.64
3,Female,Meningioma,Infratentorial,70,7.95,SRS,0,26.46
4,Female,LG glioma,Supratentorial,80,7.61,SRT,1,47.8
6,Female,Meningioma,Supratentorial,80,4.82,SRS,0,52.75
9,Female,Meningioma,Supratentorial,70,12.16,SRT,0,34.66
```

10) ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5\$ grep ",1," BrainCancer.csv 2,Male,HG glioma,Supratentorial,90,19.35,SRT 8.98 47.8 4,Female,LG glioma,Supratentorial,80,7.61,SRT 5,Male,HG glioma,Supratentorial,90,5.06,SRT, 6.3 11,Male,LG glioma,Supratentorial,80,0.14,SRT 1,35.93 16,Female,HG glioma,Supratentorial,70,11.38,SRS, 7.05 17, Female, Other, Infratentorial, 60, 24, SRT, 1, 6.82 19, Male, Meningioma, Supratentorial, 80, 13.49, SRS 6.92 22, Male, HG glioma, Supratentorial, 70, 14.44, SRT, 1 **.** 14 24, Female, Meningioma, Infratentorial, 100, 2.13, SRS, 1, 5, 25, Female, Meningioma, Supratentorial, 70, 6.48, SRT, 1, 33, 26, Male, LG glioma, Supratentorial, 90, 4.23, SRT, 1, 25.02 51.02 33.41 27, Male, Other, Supratentorial, 60, 34.64, SRT, 1, 11.57 28, Male, HG glioma, Supratentorial, 70, 33.69, SRT, 0.07 31,Female,LG glioma,Supratentorial,80,0.85,SRS .6.1 10.82 33, Female, Other, Infratentorial, 70, 13.45, SRT, 1 38, Male, HG glioma, Supratentorial, 90, 9.95, SRT 39, Male, Other, Infratentorial, 80, 12.51, SRT, 1, 29.7 42, Male, HG glioma, Supratentorial, 90, 0.28, SRT, 16.43 44, Male, Meningioma, Supratentorial, 80, 12.63, SRT 4.16 31.25 46, Male, Meningioma, Supratentorial, 60, 7.09, SRS 48, Female, Meningioma, Supratentorial, 80, 26.31, SRT, 39.54 49, Male, Meningioma, Supratentorial, 70, 0.97, SRT, 1.41 53, Male, HG glioma, Supratentorial, 90, 2.5, SRT, 1, 55, Female, HG glioma, Supratentorial, 80, 0.63, SRT, 1,16,92 58, Male, HG glioma, Supratentorial, 80, 3.75, SRT, 59, Female, Other, Supratentorial, 80, 11.83, SRT, 1, 22.03 61,Female,HG glioma,Supratentorial,80,12.08,SRT 7.25 62, Male, Meningioma, Supratentorial, 80, 11.51, SRT 14.62 63, Female, HG glioma, Supratentorial, 40, 22.87, SRT .3.38 67, Female, HG glioma, Supratentorial, 80, 7.59, SRT 4.56 72, Male, Meningioma, Supratentorial, 80, 20.93, SRT 31.15 74, Female, HG glioma, Supratentorial, 80, 0.19, SRT 11.02 81,Female,HG glioma,Supratentorial,80,15.45,SRT 46.16 84, Male, HG glioma, Supratentorial, 80, 0.16, SRT, 1, 20.69 85, Male, HG glioma, Supratentorial, 80, 19.81, SRT, 1, 6.39

```
ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ grep -c ",1," BrainCancer.csv
35
```

We can use -v to list non matching lines, However the header is included while counting and hence the count comes out as 35+header = 36.

```
ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ grep -v ".0." BrainCancer.csv
,sex,diagnosis,loc,ki,gtv,stereo,status,time
2, Male, HG glioma, Supratentorial, 90, 19.35, SRT, 1, 8.98
4, Female, LG glioma, Supratentorial, 80, 7.61, SRT, 1, 47.8
5, Male, HG glioma, Supratentorial, 90, 5.06, SRT, 1, 6.3
11, Male, LG glioma, Supratentorial, 80, 0.14, SRT, 1, 35.93
16, Female, HG glioma, Supratentorial, 70, 11.38, SRS, 1, 7.05
17, Female, Other, Infratentorial, 60, 24, SRT, 1, 6.82
19, Male, Meningioma, Supratentorial, 80, 13.49, SRS, 1, 6.92
22, Male, HG glioma, Supratentorial, 70, 14.44, SRT, 1, 14
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
31, Female, LG glioma, Supratentorial, 80, 0.85, SRS, 1, 6.1
33, Female, Other, Infratentorial, 70, 13.45, SRT, 1, 10.82
38, Male, HG glioma, Supratentorial, 90, 9.95, SRT, 1, 6.23
39, Male, Other, Infratentorial, 80, 12.51, SRT, 1, 29.7
42, Male, HG glioma, Supratentorial, 90, 0.28, SRT, 1, 16.43
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
53, Male, HG glioma, Supratentorial, 90, 2.5, SRT, 1, 9.77
55, Female, HG glioma, Supratentorial, 80, 0.63, SRT, 1, 16.92
58, Male, HG glioma, Supratentorial, 80, 3.75, SRT, 1, 19.9
59, Female, Other, Supratentorial, 80, 11.83, SRT, 1, 22.03
61, Female, HG glioma, Supratentorial, 80, 12.08, SRT, 1, 7.25
62, Male, Meningioma, Supratentorial, 80, 11.51, SRT, 1, 14.62
63, Female, HG glioma, Supratentorial, 40, 22.87, SRT, 1, 3.38
67, Female, HG glioma, Supratentorial, 80, 7.59, SRT, 1, 4.56
72, Male, Meningioma, Supratentorial, 80, 20.93, SRT, 1, 31.15
74, Female, HG glioma, Supratentorial, 80, 0.19, SRT, 1, 11.02
81, Female, HG glioma, Supratentorial, 80, 15.45, SRT, 1, 46.16
84, Male, HG glioma, Supratentorial, 80, 0.16, SRT, 1, 20.69
85, Male, HG glioma, Supratentorial, 80, 19.81, SRT, 1, 6.39
ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ grep -cv ",0," BrainCancer.csv
36
```

```
$$ grep -i infratentorial BrainCancer.csv
 1,Female,Meningioma,
                                                                                              ,90,6.11,SRS,0,57.64
                                                                                              ,70,7.95,SRS,0,26.46
l,90,6.54,SRS,0,34.26
 3, Female, Meningioma,
 12, Female, Meningioma,
13, Female, Meningioma,
17, Female, Other, Infra
                                                                            entortal,90,0.63,SRS,0,32.98
tal,60,24,SRT,1,6.82
tal,80,2.11,SRS,0,10.49
entortal,100,2.13,SRS,1,51.02
tal,70,13.45,SRT,1,10.82
t,80,6.81,SRS,0,57.11
t,80,12.51,SRT,1,29.7
t,90,3.12,SRT,0,18.95
entortal,90,9.24,SRT,0,26.85
tortal,80,24.41,SRT,0,39.54
t,90,0.48,SRS,0,54.43
prial,80,0.22,SRS,0,33.67
t,70,0.01,SRS,0,23.67
entortal,70,2.94,SRS,0,1.54
prial,90,30.41,SRT,0,1.18
t,80,0.11,SRT,0,13.9
                                                                                                 ,90,0.63,SRS,0,32.98
23, Female, Other, Infrat
24, Female, Meningioma, 1
33, Female, Other, Infrat
34, Male, Other, Infrate
39, Male, Other, Infrate
45, Male, Other, Infrate
52, Female, Meningioma,
54, Male, Meningioma, 1
56, Male, Other, Infrat
57,Male,HG glioma,Infi
68,Male,Other,Infrater
80,Female,Meningioma,I
83,Male,LG glioma,Infi
88, Male, Other, Infratentorial, 80, 0.11, SRT, 0, 13.9 tbab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ grep -ci infratentorial BrainCancer.csv
19
 ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ grep -i infratentorial BrainCancer.csv > infratentorialsorted.out
 ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ head -10 infratentorialsorted.out
1, Female, Meningioma, Infratentorial, 90,6.11, SRS,0,57.64
3, Female, Meningioma, Infratentorial, 70,7.95, SRS,0,26.46
12, Female, Meningioma, Infratentorial, 90,6.54, SRS,0,34.26
13, Female, Meningioma, Infratentorial, 90,0.63, SRS,0,32.98
13, Female, Other, Infratentorial, 60, 24, SRT, 1, 6.82
23, Female, Other, Infratentorial, 80, 2.11, SRS, 0, 10.49
24, Female, Meningioma, Infratentorial, 100, 2.13, SRS, 1,51.02
33, Female, Other, Infratentorial, 70, 13.45, SRT, 1, 10.82
34, Male, Other, Infratentorial, 80, 6.81, SRS, 0, 57.11
39, Male, Other, Infratentorial, 80, 12.51, SRT, 1, 29.7
```

12)

```
ibab@IBAB-Workshop-Comp005:-/Downloads/Lab5$ ls
30months.out BrainCancer.csv HGsorted.out infratentorialsorted.out lessthan30months.out malecount.out SRSsorted.out supratentorial30months.out supratentorial30months.out tbab@IBAB-Workshop-Comp005:-/Downloads/Lab5$ tar -cvf outputs.tar LinesWithMeningoma.out malecount.out supratentorial30months.out infratentorialsorted.out ki.out infrasRs.out
LinesWithMeningoma.out malecount.out supratentorialsorted.out infratentorialsorted.out infratentorialsorted.out infratentorialsorted.out infratentorialsorted.out infratentorialsorted.out infratentorialsorted.out ki.out infratentorialsorted.out ki.out infrasRs.out ibab@IBAB-Workshop-Comp005:-/Downloads/Lab5$ cat outputs.tar
LinesWithMeningoma.out000066400017520000175200000000446315043110065013734 Oustar ibabibab1,Female,Meningioma,Infratentorial,90,6.11,SRS,0,57.64
3,Female,Meningioma_Supratentorial,70,7.95,SRS,0,26.46
6 Female_Meningioma_Supratentorial,80,4.82 SPS 0,52.75
```

```
lbab@IBAB-Workshop-Comp005:~/Downloads/Labi$ tar -cvzf outputs2.tar 50months.out hgglioma50months.out lggliomasupten30.out icommand.out dead.out first10infra.out
50months.out
hgglioma50months.out
lggliomasupten30.out
lcommand.out
dead.out
first10infra.out
lcommand.out
dead.out
first10infra.out
lbab@IBAB-Workshop-Comp005:~/Downloads/Labi$ cat outputs2.tar
```

```
ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ tar -xvf outputs.tar
LinesWithMeningoma.out
malecount.out
femalecount.out
supratentorialsorted.out
infratentorialsorted.out
ki.out
infraSRS.out
```

ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5\$ mkdir out1extract

ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5\$ mv outputs.tar out1extract

```
lbab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ cd outlextract
lbab@IBAB-Workshop-Comp005:~/Downloads/Lab5$/outlextract$ cat outputs.tar
LinesWithMeningoma.out0006640001752000175200000000446315043110065013734 Oustar
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,80,4.82,SRS,0,52.75
9,Female,Meningioma,Supratentorial,70,12.16,SRT,0,34.66
12,Female,Meningioma,Infratentorial,90,0.63,SRS,0,34.26
13,Female,Meningioma,Infratentorial,90,0.63,SRS,0,322.98
15,Female,Meningioma,Supratentorial,80,13.49,SRS,1,6.92
20,Female,Meningioma,Supratentorial,80,13.49,SRS,1,6.92
20,Female,Meningioma,Supratentorial,90,2.5,SRT,0,30.16
21,Female,Meningioma,Supratentorial,90,2.5,SRT,0,30.16
21,Female,Meningioma,Supratentorial,70,6.48,SRT,1,33.41
29,Male,Meningioma,Supratentorial,70,6.48,SRT,1,33.41
29,Male,Meningioma,Supratentorial,90,2.5,SRS,0,44.39
35,Female,Meningioma,Supratentorial,90,2.5,SRS,0,45.93
35,Female,Meningioma,Supratentorial,80,6.6,SRT,0,14.75
40,Female,Meningioma,Supratentorial,80,7.3,SRT,0,5.51
37,Female,Meningioma,Supratentorial,80,7.3,SRT,0,5.51
40,Female,Meningioma,Supratentorial,80,7.3,SRT,0,5.51
40,Female,Meningioma,Supraten
```

```
ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ tar -xvf outputs2.tar
50months.out
hgglioma50months.out
lggliomasupten30.out
icommand.out
dead.out
first10infra.out
ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ mkdir out2extract
ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ mv outputs2.tar out2extract
ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ cd out2extract
ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5$ out2extract
ibab@IBAB-Workshop-Comp005:~/Downloads/Lab5/out2extract$ ls
outputs2.tar
```