Alex Siegel

System-Level Programming

Lab 4b

1) $ grep 'Towns\|Union' mountainList.txt

```
[asiegel11@gsuad.gsu.edu@snowball Lab4]$ grep 'Towns\|Union' mountainList.txt
    Brasstown Bald, (summit),4784,feet,Union County
            Hightower Bald, (summit),4568,feet,Towns County
Wolfpen Ridge, (ridge high point),4561,feet,Towns and Union
      Blood Mountain, (summit),4458,feet,Union County
Tray Mountain, (summit), 4430,feet,Towns County
Slaughter Mountain, (summit),4338,feet,Union County
Coosa Bald, (summit),4280,feet,Union County
[asiegel11@gsuad.gsu.edu@snowball Lab4]$
```

2) $ grep 'Rabun County' mountainList.txt | wc -l

```
[asiegel11@gsuad.gsu.edu@snowball Lab4]$ grep 'Rabun County' mountainList.txt | wc -l
4
[asiegel11@gsuad.gsu.edu@snowball Lab4]$
```

3) $ grep -c 'Rabun County' mountainList.txt

```
[asiegel11@gsuad.gsu.edu@snowball Lab4]$ grep -c 'Rabun County' mountainList.txt
4
[asiegel11@gsuad.gsu.edu@snowball Lab4]$
```

4a)

```
[asiegel11@gsuad.gsu.edu@snowball Lab4]$ sed 's/ridge high point/r.h.p./p' moun
tainList.txt
    Brasstown Bald, (summit),4784,feet,Union County
Rabun Bald, (summit),4696,feet,Rabun County
Dick's Knob, (summit),4620,feet,Rabun County
            Hightower Bald, (summit),4568,feet,Towns County
Wolfpen Ridge, (r.h.p.),4561,feet,Towns and Union
Wolfpen Ridge, (r.h.p.),4561,feet,Towns and Union
Counties
        Blood Mountain, (summit),4458,feet,Union County
Tray Mountain, (summit), 4430,feet,Towns County
        Grassy Ridge, (r.h.p.),4420,feet,Rabun County
        Grassy Ridge, (r.h.p.),4420,feet,Rabun County
Slaughter Mountain, (summit),4338,feet,Union County
Double Spring Knob, (summit),4280,feet,Rabun County
Coosa Bald, (summit),4280,feet,Union County
[asiegel11@gsuad.gsu.edu@snowball Lab4]$
```

4b)

```
[asiegel11@gsuad.gsu.edu@snowball Lab4]$ sed -n 's/ridge high point/r.h.p./p' m
ountainList.txt
Wolfpen Ridge, (r.h.p.),4561,feet,Towns and Union
        Grassy Ridge, (r.h.p.),4420,feet,Rabun County
[asiegel11@gsuad.gsu.edu@snowball Lab4]$
```

4c) The -n in sed suppressed the automatic printing of pattern space

4d) the sed -n command in part b only prints out the mountains that appear in the list multiple times

5) sed 's/^ *//' mountainList.txt

```
[asiegel11@gsuad.gsu.edu@snowball Lab4]$ sed 's/^ *//' mountainList.txt mountainList.txt
Brasstown Bald, (summit),4784,feet,Union County
Rabun Bald, (summit),4696,feet,Rabun County
Dick's Knob, (summit),4620,feet,Rabun County
          Hightower Bald, (summit),4568,feet,Towns County
Wolfpen Ridge, (ridge high point),4561,feet,Towns and Union
Counties
     Blood Mountain, (summit),4458,feet,Union County
Tray Mountain, (summit), 4430,feet,Towns County
      Grassy Ridge, (ridge high point),4420,feet,Rabun County
Slaughter Mountain, (summit),4338,feet,Union County
Double Spring Knob, (summit),4280,feet,Rabun County
Coosa Bald, (summit),4280,feet,Union County
Brasstown Bald, (summit),4784,feet,Union County
Rabun Bald, (summit),4696,feet,Rabun County
Dick's Knob, (summit),4620,feet,Rabun County
          Hightower Bald, (summit),4568,feet,Towns County
Wolfpen Ridge, (ridge high point),4561,feet,Towns and Union
Counties
     Blood Mountain, (summit),4458,feet,Union County
Tray Mountain, (summit), 4430,feet,Towns County
      Grassy Ridge, (ridge high point),4420,feet,Rabun County
Slaughter Mountain, (summit),4338,feet,Union County
Double Spring Knob, (summit),4280,feet,Rabun County
Coosa Bald, (summit),4280,feet,Union County
[asiegel11@gsuad.gsu.edu@snowball Lab4]$
```

6) sed 's/^ *//' mountainList.txt >newList.txt

```
[asiegel11@gsuad.gsu.edu@snowball Lab4]$ sed 's/^ *//' mountainList.txt > newList.txt
[asiegel11@gsuad.gsu.edu@snowball Lab4]$ ls
mountainList.txt  newList.txt
```

7) sed -n '/^[[:space:]]/p' mountainList.txt

```
[asiegel11@gsuad.gsu.edu@snowball Lab4]$ sed -n  '/^[[:space:]]/p' mountainList.txt
     Brasstown Bald, (summit),4784,feet,Union County
          Hightower Bald, (summit),4568,feet,Towns County
      Blood Mountain, (summit),4458,feet,Union County
      Grassy Ridge, (ridge high point),4420,feet,Rabun County
[asiegel11@gsuad.gsu.edu@snowball Lab4]$
```

8) sed '/Union County/d' mountainList.txt

```
[asiegel11@gsuad.gsu.edu@snowball Lab4]$ sed '/Union County/d' mountainList.txt
Rabun Bald, (summit),4696,feet,Rabun County
Dick's Knob, (summit),4620,feet,Rabun County
          Hightower Bald, (summit),4568,feet,Towns County
Wolfpen Ridge, (ridge high point),4561,feet,Towns and Union
Counties
Tray Mountain, (summit), 4430,feet,Towns County
      Grassy Ridge, (ridge high point),4420,feet,Rabun County
Double Spring Knob, (summit),4280,feet,Rabun County
[asiegel11@gsuad.gsu.edu@snowball Lab4]$
```

9) $ sed -r 's/,[^,]*,[^,]*,[^,]*,/,/g' mountainList.txt

```
[asiegel11@gsuad.gsu.edu@snowball Lab4]$ sed -r 's/,[^,]*,[^,]*,[^,]*,/,/g' mountainList.txt
     Brasstown Bald,Union County
Rabun Bald,Rabun County
Dick's Knob,Rabun County
              Hightower Bald,Towns County
Wolfpen Ridge,Towns and Union
Counties
       Blood Mountain,Union County
Tray Mountain,Towns County
       Grassy Ridge,Rabun County
Slaughter Mountain,Union County
Double Spring Knob,Rabun County
Coosa Bald,Union County
[asiegel11@gsuad.gsu.edu@snowball Lab4]$ 
```

10) ?

11) Sed -f sed1 mountainList.txt

```
[asiegel11@gsuad.gsu.edu@snowball Lab4]$ cat >sed1
1i\
Table: Eleven highest mountains in Georgia
[asiegel11@gsuad.gsu.edu@snowball Lab4]$ sed -f sed1 mountainList.txt
Table: Eleven highest mountains in Georgia
     Brasstown Bald, (summit),4784,feet,Union County
Rabun Bald, (summit),4696,feet,Rabun County
Dick's Knob, (summit),4620,feet,Rabun County
              Hightower Bald, (summit),4568,feet,Towns County
Wolfpen Ridge, (ridge high point),4561,feet,Towns and Union
Counties
       Blood Mountain, (summit),4458,feet,Union County
Tray Mountain, (summit), 4430,feet,Towns County
       Grassy Ridge, (ridge high point),4420,feet,Rabun County
Slaughter Mountain, (summit),4338,feet,Union County
Double Spring Knob, (summit),4280,feet,Rabun County
Coosa Bald, (summit),4280,feet,Union County
[asiegel11@gsuad.gsu.edu@snowball Lab4]$ 
```

12) Sort -tc +0 -2 mountainList.txt

```
[asiegel11@gsuad.gsu.edu@snowball Lab4]$ sort -tc +0 -2 mountainList.txt
       Blood Mountain, (summit),4458,feet,Union County
     Brasstown Bald, (summit),4784,feet,Union County
Coosa Bald, (summit),4280,feet,Union County
Counties
Dick's Knob, (summit),4620,feet,Rabun County
Double Spring Knob, (summit),4280,feet,Rabun County
       Grassy Ridge, (ridge high point),4420,feet,Rabun County
              Hightower Bald, (summit),4568,feet,Towns County
Rabun Bald, (summit),4696,feet,Rabun County
Slaughter Mountain, (summit),4338,feet,Union County
Tray Mountain, (summit), 4430,feet,Towns County
Wolfpen Ridge, (ridge high point),4561,feet,Towns and Union
[asiegel11@gsuad.gsu.edu@snowball Lab4]$ 
```

13) ?

14) sed -E 's/(Union)\s(County)/\1:\2g' mountainList.txt

```
[asiegel11@gsuad.gsu.edu@snowball Lab4]$ sed -E 's/(Union)\s(County)/\1:\2/g' m
ountainList.txt
    Brasstown Bald,4784,Union:County
Rabun Bald,4696,Rabun County
Dick's Knob,4620,Rabun County
                Hightower Bald,4568,Towns County
Wolfpen Ridge,4561,Towns and Union
Counties
        Blood Mountain,4458,Union:County
Tray Mountain, 4430,Towns County
        Grassy Ridge,4420,Rabun County
Slaughter Mountain,4338,Union:County
Double Spring Knob,4280,Rabun County
Coosa Bald,4280,Union:County
[asiegel11@gsuad.gsu.edu@snowball Lab4]$
```

15) sed -E 's/,.*,/,/' mountainList.txt


```
[asiegel11@gsuad.gsu.edu@snowball Lab4]$ sed -E 's/,.*,/,/' mountainList.txt
    Brasstown Bald,Union County
Rabun Bald,Rabun County
Dick's Knob,Rabun County
                Hightower Bald,Towns County
Wolfpen Ridge,Towns and Union
Counties
        Blood Mountain,Union County
Tray Mountain,Towns County
        Grassy Ridge,Rabun County
Slaughter Mountain,Union County
Double Spring Knob,Rabun County
Coosa Bald,Union County
[asiegel11@gsuad.gsu.edu@snowball Lab4]$
```