

### 1.10.2 Hormone Levels in Baboons

Gesquiere et al. (2011) studied hormone levels in the blood of baboons. Every individual was sampled several times.

1. How many times were the levels of individuals 3 and 27 recorded?
2. Write a script taking as input the file name and the ID of the individual, and returning the number of records for that ID.
3. **[Advanced]**<sup>17</sup> Write a script that returns the number of times each individual was sampled.

LIT 1

```
MINGW64/C:/Users/LENOVO/videos/BIOINFOR/CSB-master/unix/data
LENOVO@allan MINGW64 ~/videos/BIOINFOR/CSB-master/unix/data (main)
$ cat Gesquiere2011_data.csv | cut -f 1 | head -n 15
maleID
1
1
1
1
1
1
1
1
1
1
1
2
2
3
3

LENOVO@allan MINGW64 ~/videos/BIOINFOR/CSB-master/unix/data (main)
$ cat Gesquiere2011_data.csv | cut -f 1 | grep -c -w 3 | head -n 15
61

LENOVO@allan MINGW64 ~/videos/BIOINFOR/CSB-master/unix/data (main)
$ cat Gesquiere2011_data.csv | cut -f 1 | grep -c -w 3
61

LENOVO@allan MINGW64 ~/videos/BIOINFOR/CSB-master/unix/data (main)
$ cat Gesquiere2011_data.csv | cut -f 1 | grep -c -w 27
5

LENOVO@allan MINGW64 ~/videos/BIOINFOR/CSB-master/unix/data (main)
$
```

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LIT 2

```

LENOVO@allan MINGW64 ~/videos/BIOINFOR/CSB-master/unix/data (main)
$ nano script.sh

LENOVO@allan MINGW64 ~/videos/BIOINFOR/CSB-master/unix/data (main)
$ ls
Buzzard2015_about.txt      Gesquiere2011_data.csv  Pacifici2013_data.csv  miRNA/
Buzzard2015_data.csv      Marra2014_about.txt    Saavedra2013/          sandbox
Gesquiere2011_about.txt   Pacifici2013_about.txt  Saavedra2013_about.txt script.sh

LENOVO@allan MINGW64 ~/videos/BIOINFOR/CSB-master/unix/data (main)
$ cat script.sh
cut -f 1 $1.csv | grep -c -w $2

LENOVO@allan MINGW64 ~/videos/BIOINFOR/CSB-master/unix/data (main)
$ bash script.sh Gesquiere2011_data.scv 1
cut: Gesquiere2011_data.scv.csv: No such file or directory
0

LENOVO@allan MINGW64 ~/videos/BIOINFOR/CSB-master/unix/data (main)
$ bash script.sh Gesquiere2011_data 1
10

LENOVO@allan MINGW64 ~/videos/BIOINFOR/CSB-master/unix/data (main)
$ bash script.sh Gesquiere2011_data 2
2

LENOVO@allan MINGW64 ~/videos/BIOINFOR/CSB-master/unix/data (main)
$ bash script.sh Gesquiere2011_data 3
61

LENOVO@allan MINGW64 ~/videos/BIOINFOR/CSB-master/unix/data (main)
$ bash script.sh Gesquiere2011_data 4
46

LENOVO@allan MINGW64 ~/videos/BIOINFOR/CSB-master/unix/data (main)
$ bash script.sh Gesquiere2011_data 5
28

LENOVO@allan MINGW64 ~/videos/BIOINFOR/CSB-master/unix/data (main)
$ bash script.sh Gesquiere2011_data 6
7

LENOVO@allan MINGW64 ~/videos/BIOINFOR/CSB-master/unix/data (main)
$ bash script.sh Gesquiere2011_data 7
5

LENOVO@allan MINGW64 ~/videos/BIOINFOR/CSB-master/unix/data (main)
$ bash script.sh Gesquiere2011_data 8
17

LENOVO@allan MINGW64 ~/videos/BIOINFOR/CSB-master/unix/data (main)
$ bash script.sh Gesquiere2011_data 9
4

LENOVO@allan MINGW64 ~/videos/BIOINFOR/CSB-master/unix/data (main)
$ bash script.sh Gesquiere2011_data 10
21

LENOVO@allan MINGW64 ~/videos/BIOINFOR/CSB-master/unix/data (main)
$ |

```

MINGW64:/c/Users/LENOVO/Videos/BIOINFOR/CSB-master/unix/data

LENOVO@allan MINGW64 ~/Videos/BIOINFOR/CSB-master/unix/data (master)

\$ nano script2.sh

LENOVO@allan MINGW64 ~/Videos/BIOINFOR/CSB-master/unix/data (master)

\$ ls  
Buzzard2015\_about.txt Gesquiere2011\_about.txt Marra2014\_about.txt Pacifici2013\_data.csv Saavedra2013\_about.txt sandbox script2.sh  
Buzzard2015\_data.csv Gesquiere2011\_data.csv Pacifici2013\_about.txt Saavedra2013/ miRNA/ script.sh

LENOVO@allan MINGW64 ~/Videos/BIOINFOR/CSB-master/unix/data (master)

\$ cat script2.sh  
cut -f 1 \$1.csv | sort | uniq -c

LENOVO@allan MINGW64 ~/Videos/BIOINFOR/CSB-master/unix/data (master)

\$ bash script2.sh Gesquiere2011\_data

LENOVO@allan MINGW64 ~/Videos/BIOINFOR/CSB-master/unix/data (master)

\$ bash script2.sh Gesquiere2011\_data

```
10 1
21 10
13 100
26 101
15 102
26 103
29 104
6 105
46 106
7 107
41 108
28 109
26 11
3 110
24 111
3 112
1 113
1 114
1 115
14 116
23 118
1 119
23 12
42 120
12 121
9 122
39 123
1 124
39 125
15 126
13 127
16 13
1 14
40 15
31 16
3 17
4 18
3 19
2 2
4 20
12 21
5 22
36 23
35 24
35 25
22 26
5 27
33 29
61 3
63 30
1 31
3 32
1 33
16 34
5 35
```

```
0 52
3 53
22 54
20 55
41 56
46 57
1 58
25 59
7 6
51 60
20 61
13 62
35 63
34 64
38 65
20 66
1 67
10 68
22 69
5 7
33 70
5 71
2 72
10 73
1 74
15 75
39 76
2 77
29 78
4 79
17 8
35 80
1 81
27 82
2 83
11 84
1 85
39 86
18 87
46 88
25 89
4 9
24 90
32 91
1 92
7 93
25 94
71 95
17 96
17 97
5 98
2 99
1 maleID
```

```
LENOVO@allan MINGW64 ~/Videos/BIOINFOR/CSB-master/unix/data (master)
$ |
```