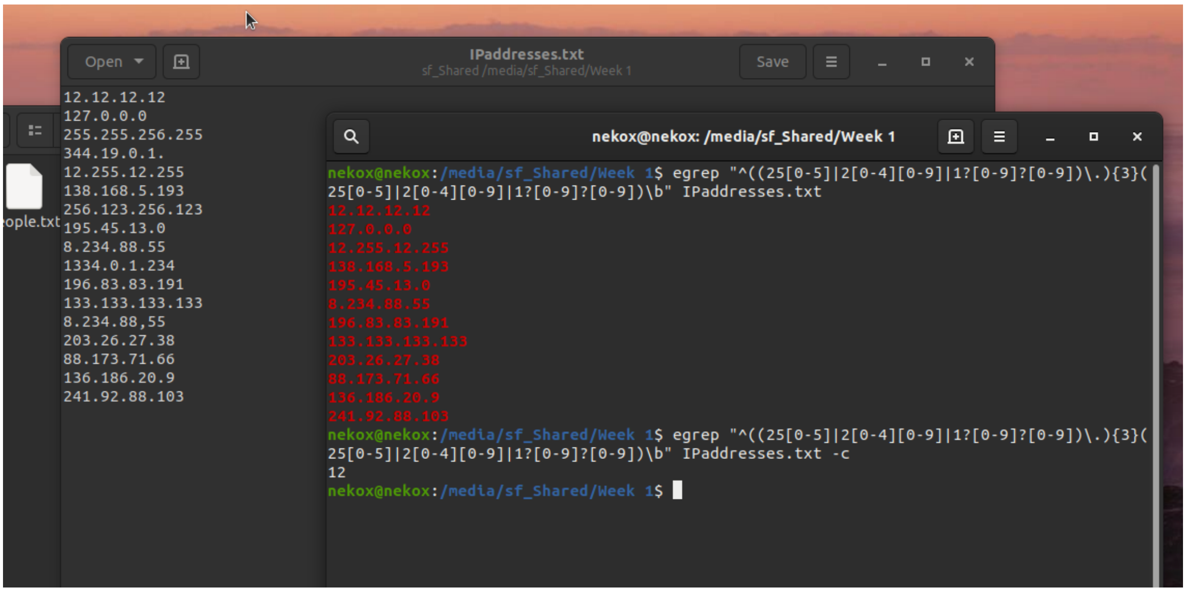
Fundamentals of Data Management

2019HS2 | 101624964 | Jimmy Trac

Past Task 1.1.1

Below is a screenshot of the e `grep` command used on `IPaddresses.txt`



Open
Save
IPaddresses.txt
sf_Shared /media/sf_Shared/Week 1
ople.txt
nekox@nekox: /media/sf_Shared/Week 1

```
12.12.12.12
127.0.0.0
255.255.256.255
344.19.0.1.
12.255.12.255
138.168.5.193
256.123.256.123
195.45.13.0
8.234.88.55
1334.0.1.234
196.83.83.191
133.133.133.133
8.234.88,55
203.26.27.38
88.173.71.66
136.186.20.9
241.92.88.103
```

```
nekox@nekox:/media/sf_Shared/Week 1$ egrep "^((25[0-5]|2[0-4][0-9]|1?[0-9]?[0-9])\.){3}(
25[0-5]|2[0-4][0-9]|1?[0-9]?[0-9])\b" IPaddresses.txt
12.12.12.12
127.0.0.0
12.255.12.255
138.168.5.193
195.45.13.0
8.234.88.55
196.83.83.191
133.133.133.133
203.26.27.38
88.173.71.66
136.186.20.9
241.92.88.103
nekox@nekox:/media/sf_Shared/Week 1$ egrep "^((25[0-5]|2[0-4][0-9]|1?[0-9]?[0-9])\.){3}(
25[0-5]|2[0-4][0-9]|1?[0-9]?[0-9])\b" IPaddresses.txt -c
12
nekox@nekox:/media/sf_Shared/Week 1$ 
```

The command used is `^((25[0-5]|2[0-4][0-9]|1?[0-9]?[0-9])\.){3}(25[0-5]|2[0-4][0-9]|1?[0-9]?[0-9])\b`

Breaking it down:

- `^` implies that the search must start at a new line (and therefore a new entry)
- `(25[0-5]|2[0-4][0-9]|1?[0-9]?[0-9])\.` breaks down into:
    - `250-255 OR 200-249 OR 0-199` and then a full-stop `.`
- `{3}` implies that the above should be run three times exactly, as IP addresses are 0-255.0-255.0-255.0-255
- `(25[0-5]|2[0-4][0-9]|1?[0-9]?[0-9])` repeats such that the full-stop is **not** captured
- `\b` ensures that there is a word break and therefore, there are no additional characters.