### **Assignment - Linux**

<https://classroom.google.com/c/NDI4MDcwOTkwMzNa/a/NDI4MDY0MDA3Nzha/details>

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#### **Question**

Look at the following command and explain what it does by going through the documentation of each of the individual commands. Use the tools you've learned in the previous lesson to figure out step by step what is happening in the following.

curl -s<http://public-dns.info/nameserver/br.csv> | cut -d, -f1 | shuf | tail -n 50 | xargs -i timeout 1 ping -c1 -w 1 {} | grep "time=" | awk '{print substr($7, 6, length($7)) " " substr($4, 1, length($4) -1)}' | sort -n | awk '{print $2 " " $1 "ms"}' | head -n 10

In the submission, explain how the each command, its options and complete command works. Also add a screenshot of the output(4 or 5 lines after running the command will be enough)

#### **Answer**

1. curl -s <http://public-dns.info/nameserver/br.csv>  
   Here file br.csv is transferred from the server using http.
2. cut -d, -f1  
   Here comma “,” is being specified as delimiter and extracting column 1 i.e. IP address
3. shuf  
   The lines are randomly shuffled, it is used to randomize the data.
4. tail -n 50  
   Display last 50 lines only
5. xargs -i timeout 1 ping -c1 -w 1 {}  
   We are pinging each IP address with 1 packet with timeout of 1 second. We also have process timeout of 1 second.
6. grep "time="  
   Filter lines with string “time=”
7. awk '{print substr($7, 6, length($7)) " " substr($4, 1, length($4) -1)}'   
   awk by default splits line at whitespaces “ “ . Here we are selecting data in
   1. 7th field from 6th Byte to the end.
   2. 4th field from 1th Byte to the end - 1 Bytes.
8. sort -n  
   Performing sort numerically with least ping time appearing first.
9. awk '{print $2 " " $1 "ms"}'   
   awk by default splits line at whitespaces “ “ . we are displaying second field first and then first field followed by “ms”
10. head -n 10  
    Display the top 10 rows.

#### **Output**

