

Big data analytics HOME WORK 1

Q1. Open the file /var/log/messages in the vi editor and delete line number 150.

```
$vi /var/log/messages
```

This is used to open a message file.

(:set number)-This is used to set specific line of the line inside the file.

(:150 d) - This is representation of particular line to be delete

(:wq) - This command used to exit&save from a file.

Q2. Write a shell script to add two numbers?

Calculate the sum of two integers with pre initialize values in a shell script

```
$var1=10
```

```
$var2=20
```

```
$sum=$(( $var1 + $var2 ))
```

```
$Echo $sum
```

Output

30

Q3. User root wants to copy /etc, including all subdirectories and files to /tmp. How will you achieve this task?

Using the below command can we achieve copy /etc, including all subdirectories and files to /tmp.

```
$sudo cd /etc
```

```
$cp -r /etc tmp
```

Q4. Create a file that contains only the username and the user id of all the users present on the server.

By this unix command can we create a file that contains only the username and the user id of all the user present on the server.

```
$cat /etc/passwd
```

Q5. How will you provide a count of all users on the system except for adm user?

Using the (\$ who) command we can count a all users on the system except for adm user.

Q6. How will you list all files in /tmp in increasing order of their size?

```
$ ls -laShr /tmp
```

- Where (-l) flag means long listing and (-a) tells (ls) to list all files including hidden files.
- (-S) is used to sort all files according to their size
- (-h) is used to show the file size in human readable format
- (-r) is used to show the list of files in increasing order.

Q7. What command is used to clear history on the Linux server?

- If you want to delete a particular command, enter history -d <line number> .
- To clear the entire contents of the history file, execute history -c .

Q8. Explain “Big Data” and what are five V’s of Big Data?

BigData:

- The definition of big data is data that contains greater variety, arriving in increasing volumes and with more velocity.
- This is also known as the three Vs. Put simply, big data is larger, more complex data sets, especially from new data sources.

Five V’s of Big Data:

- volume
- value
- variety
- velocity
- veracity

Q9. What is Hadoop and its components?

Hadoop:

- Hadoop is a framework that uses distributed storage and parallel processing to store and manage big data.
- It is the software most used by data analysts to handle big data,
- It is market size continues to grow. There are three components of Hadoop

components of the Hadoop:

1. Hadoop HDFS - Hadoop Distributed File System (HDFS) is the storage unit.
2. Hadoop MapReduce - Hadoop MapReduce is the processing unit.
3. Hadoop YARN - Yet Another Resource Negotiator (YARN) is a resource management unit