Assignment 5

Submitted by :	
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Question 1: Explain this following bash script:

```bash
#!/bin/bash
space_free=$( df -h | awk '{ print $5 }' | sort -n | tail -n 1 | sed 's/%//' )
case $space_free in
[1-5]*)
echo Plenty of disk space available
;;
[6-7]*)
echo There could be a problem in the near future
;;
8*)
echo Maybe we should look at clearing out old files
;;
9*)
echo We could have a serious problem on our hands soon
;;
*)
echo Something is not quite right here
;;
esac
```
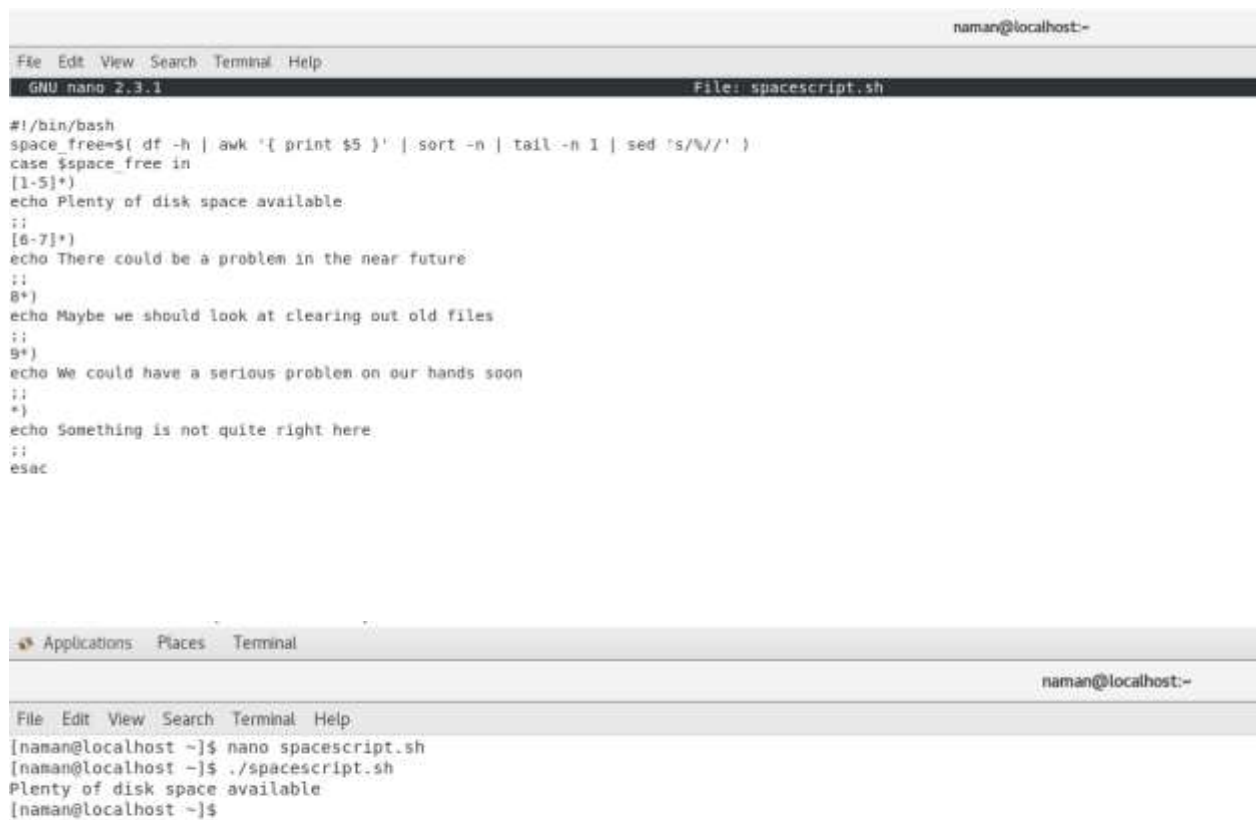
- Here df –h will give us filesystem, their size, used space, available space, used space in percentage and where it is mounted.
- Then awk '{ print $5 }' will give us each row's 5th column value .Which means here will get used space in percentage.
- sort –n will sort numerically
- tail -n 1 will give last value from above sorted list
- sed 's/%//' will replace % with empty string
- Now our variable space_free holds the the filesystem value which among others is the highest one.
- Now based on the value of space_free variable it will enter in relevant switch case and then it will show relevant message.

Ex:


```
naman@localhost:~

File  Edit  View  Search  Terminal  Help
  GNU nano 2.3.1                                        File: spacescript.sh

#!/bin/bash
space_free=$( df -h | awk '{ print $5 }' | sort -n | tail -n 1 | sed 's/%//' )
case $space_free in
[1-5]*)
echo Plenty of disk space available
;;
[6-7]*)
echo There could be a problem in the near future
;;
8*)
echo Maybe we should look at clearing out old files
;;
9*)
echo We could have a serious problem on our hands soon
;;
*)
echo Something is not quite right here
;;
esac
```



```
 Applications  Places  Terminal

                                                        naman@localhost:~

File  Edit  View  Search  Terminal  Help
[naman@localhost ~]$ nano spacescript.sh
[naman@localhost ~]$ ./spacescript.sh
Plenty of disk space available
[naman@localhost ~]$
```