Question 1: Explain this following bash script:

```
#!/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
```

Ans: The above bash script is just checking out the free space and various cases is written according to the value of space_free variable.

If the space_free variable have value btw 1-5* the it will print "Plenty of disk space available"

If the space_free variable have value btw 6-7* the it will print "There could be a problem in the near future"

If the space_free variable have value btw 8* the it will print "Maybe we should look at clearing out old files"

If the space_free variable have value btw 9* the it will print "We could have a serious problem on our hands soon"

O/P SCREENSHOT

```
root@ip-172-31-95-3:~# ./bash.sh
There could be a problem in the near future
root@ip-172-31-95-3:~#
```