

- **Explain the 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
```

Explanation:

1. Using **df -h** command to Display the amount of free space in the file system in human readable format
2. Then giving this output as an input to the **awk '{ print \$5 }'** command
3. using **'awk '{print \$5}'** to print the 5th word in the line using the variable \$5.
4. Then giving this output as an input to the **sort -n** command
5. **sort -n** command This will sort from lowest number to highest number and write the result to standard output.
6. Then giving this output as an input to the **tail -n 1** command
7. The **tail -n 1** command print the last line of the input file

8. Then giving this output as an input to the **sed 's/%/'** command
9. This **sed 's/%/'** will remove the % from the output value  
Then Storing the value which came from the above command into the **space\_free** variable  
Based on the value of the variable the case statement will be executed