***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

**Explanation:**

1. This bash script is to find out free disk space in the system.
2. In space\_free variable it will return a value.
3. Based on value we have switch case and on difference range we are notifying to user to take certain action.