This is a bash script that is used to check the amount of free disk space on a system and then provides a message based on the percentage of free space available. Here is how the script works:

* The first line #!/bin/bash specifies that this script should be interpreted by the bash shell.
* The second line starts by calling the **df** command which is used to display the amount of free space available on each of the mounted file systems. The **-h** option makes the output human-readable (e.g., 1K, 234M, 2G, etc). The output of this command is then piped to the **awk** command, which is used to extract the fifth column from the output, which contains the percentage of disk space used for each file system.
* The output of **awk** is then piped to the **sort** command, which sorts the percentages in ascending order. The **-n** option specifies that the sorting should be done numerically rather than alphabetically.
* The output of **sort** is then piped to the **tail** command, which returns the last (highest) percentage in the sorted list. The **-n 1** option specifies that only the last line (i.e., the highest percentage) should be returned.
* Finally, the output of **tail** is piped to the sed command, which removes the percentage sign from the end of the percentage value. The result is stored in the **space\_free** variable.
* The **case** statement is used to evaluate the value of the **space\_free** variable and provides a message based on the percentage of disk space used.
* If the percentage of free space is between 1% and 5%, the script will print "Plenty of disk space available".
* If the percentage of free space is between 6% and 7%, the script will print "There could be a problem in the near future".
* If the percentage of free space starts with 8, the script will print "Maybe we should look at clearing out old files".
* If the percentage of free space starts with 9, the script will print "We could have a serious problem on our hands soon".
* If the percentage of free space does not match any of the previous conditions, the script will print "Something is not quite right here".

Output in my EC2 Instance:-  
