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Question 2.
echo 揈nter the limit:?
read n
echo 揈nter the numbers?
for((i=0; i < n; i++))
do
read m
a[i]=\$m
done
for ((i=1; i < n; i++))
do
for(( j=0; j< n-i; j++))
do
if [ \{a[\j]\} -gt \{a[\j+1]\} ]
then
t = \{a[\{j]\}\}
a[\j] = \{a[\j+1]\}
a[$j+1]=$t
fi
done
done
echo 揝orted array is?
for ((i=0; i< n; i++))
do
echo ?{a[$i]}?
done
echo 揈nter the element to be searched:?
read s
1 = 0
```

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c=0
u=\$((\$n-1))
while [ $1 -le $u ]
do
mid=\$((((\$1+\$u))/2))
if [ $s -eq ${a[$mid]} ]
then
c=1
break
elif [ $s -1t ${a[$mid]} ]
then
u=\$((\$mid-1))
else
1=\$((\$mid+1))
fi
done
if [ $c -eq 1 ]
then
echo 揈lement found at position $(($mid+1))?
else
echo 揈lement not found?
fi
question 3.
1. free command-The free command is the most simple and easy to use command to
check memory usage on linux.
syntax-$ free -m
2./proc/meminfo-The next way to check memory usage is to read the /proc/meminfo
file. Know that the /proc file system does not contain real files.
They are rather virtual files that contain dynamic information about the kernel
and the system.
syntax-$cat /proc/meminfo
```

0000-a8f6-1668-cfff-f8f.txt

- 3. vmstat—the vmstat command with the s option, lays out the memory usage statistics much like the proc command. syntax— \$ vmstat—s
- 4. Top command—he top command is generally used to check memory and cpu usage per process. However it also reports total memory usage and can be used to monitor the total RAM usage. The header on output has the required information. Here is a sample output.
- 5. htop-Similar to the top command, the htop command also shows memory usage along with various other details.

question 4.

find / -iname book1. where book one will be our file which we want to find.

question 5. cd/home

question 6.

There are various reason for this which are-

a. Security of virus—In the operating system such as Windows, users have full admin access to the accounts of software.

When the virus strikes in this system and then within few seconds it corrupts the whole system.

In short, all the files are in danger due to the open access, but in the Linux, very low access is given to the users.

Thus the viruses can抉 attack the whole system and they only attack few files, and other system works without any issue.

b.fewer use-The number of users in the Linux operating system is lesser than the iOS or Windows user.

Thus fewer people are using Linux system makes it more secure as compared to the overly crowded operating system Windows.

Question 8.

To reset a user扭 password, use passwd command. You have to change it to a different password.

Login as the root user.
Type the following command:
passwd username
Now
use new password.
#passwd new

Question 9.