

```
question 1.  
we use the single word "qalculate" only  
for example-user@host:~$ qalculate >8*6+4
```

```
terminal version=qalc
```

```
Question 2.
```

```
echo "Enter the limit:"
```

```
read n
```

```
echo "Enter 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 "Sorted array is"
```

```
for(( i=0; i<n; i++ ))
```

```
do
```

```
echo "${a[$i]}"
```

```
done

echo "Enter the element to be searched : "

read s

l=0

c=0

u=$((n-1))

while [ $l -le $u ]

do

mid=$(( ( $l+$u ) / 2 ))

if [ $s -eq ${a[$mid]} ]

then

c=1

break

elif [ $s -lt ${a[$mid]} ]

then

u=$((mid-1))

else

l=$((mid+1))

fi

done

if [ $c -eq 1 ]

then

echo "Element found at position $((mid+1))"

else

echo "Element not found"

fi

3.free -m
```

question 4.

```
find / -iname book.
```

where book one will be our file which we want to find.

question 5.

```
mkdir dir1
```

```
cd dir1
```

```
mkdir dir2
```

```
cd dir2
```

-> for coming out to original command=

```
cd../..
```

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't 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 7.

Question 8.

To reset a user's 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.

1.man cp

2.On Linux new files are created with a default set of permissions.

Specifically, a new file's permissions may be restricted in a specific way by applying a permissions "mask" called the umask.

3.sudo rm -r /path/to/folderName.

Question 9.