PROGRAM CODE:

```
//linked list operations
//chaitanya
//B21CSB019
import java.util.*;
class list {
  public static void main(String args[]) {
    Scanner s = new Scanner(System.in);
    List<String> l = new LinkedList<String>();
    l.add("Apple");
    l.add("Orange");
    l.add("Cherry");
    l.add("Grapes");
    System.out.println("List of fruits " + l);
    System.out.println("Enter element from list to delete");
    String a = s.next();
    if (l.contains(a)) {
      l.remove(a);
    } else {
      System.out.println("element does not exist");
    }
    System.out.println("list after deletion");
    Iterator it = l.iterator();
    while (it.hasNext()) {
      System.out.println(it.next());
    }
  }
}
```

OUTPUT:

```
~/AssuredCyberAngles$ javac list.java
~/AssuredCyberAngles$ java list
List of fruits [Apple, Orange, Cherry, Grapes]
Enter element from list to delete
Orange
list after deletion
Apple
Cherry
Grapes
```

PROGRAM CODE:

```
//CHAITANYA
//B2CSB019
//Quick sort algorithm
import java.util.*;
class Quicksort
{
static void display(String a[])
{
for(String name:a)
{
System.out.print(name+" ");
}
System.out.println();
}
public static int partition(String a[],int lb,int ub)
{
String pivot=a[ub];
int i=lb-1;
for(int j=lb;j<ub;j++)
{
if(a[j].compareToIgnoreCase(pivot)<0)
{
i++;
String temp=a[i];
a[i]=a[j];
a[j]=temp;
}
}
i++;
String x=a[i];
a[i]=pivot;
a[ub]=x;
return i;
}
public static void sort(String a[],int lb,int ub)
{
if(lb<ub)
{
int pindex=partition(a,lb,ub);
sort(a,lb,pindex-1);
sort(a,pindex+1,ub);
}
```

```
}
public static void main(String args[])
{
Scanner s=new Scanner(System.in);
System.out.println("Enter size of list");
int n=s.nextInt();
String[] a=new String [n];
for(int i=0;i<n;i++)
{
System.out.println("Enter name");
a[i]=s.next();
}
System.out.println("The list before sort:");
display(a);
sort(a,0,n-1);
System.out.println("After sort:");
display(a);
}
}
```

OUTPUT:

```
~/AssuredCyberAngles$ javac quick.java
~/AssuredCyberAngles$ java Quicksort
Enter size of list
5
Enter name
hello
Enter name
hi
Enter name
hey
Enter name
bonjour
Enter name
eee
The list before sort:
hello hi hey bonjour eee
After sort:
bonjour eee hello hey hi
```