import java.util.\*;

import java.io.\*;

import java.util.Iterator;

class arrayl

{

public static void main(String args[]) throws java.io.IOException

{

Scanner in=new Scanner(System.in);

String c;

int ch,pos,i=0,n;

Iterator itr;

ArrayList<String> al = new ArrayList<String>();

ArrayList<String> al1 = new ArrayList<String>();

do

{

System.out.println("\nString Operations\n1.Append\n2.Insert\n3.Delete\n4.Replace\n5.Search\n6.Index Of\n7.Strings starting with a\n8.Append list\n9.Display\n10.Exit\nEnter your choice : ");

ch=in.nextInt();

switch(ch)

{

case 1:System.out.println("Enter the string to be appended");

c=in.next();

al.add(c);

System.out.println(al);

break;

case 2:System.out.println("Enter the string to be inserted : ");

c=in.next();

System.out.println("Enter the position to be inserted : ");

pos=in.nextInt();

al.add(pos,c);

System.out.println(al);

break;

case 3:System.out.println("Enter the string to be deleted : ");

c=in.next();

if(al.contains(c))

{

al.remove(c);

System.out.println(al);

}

else

System.out.println("Element not found!");

break;

case 4:System.out.println("Enter the string to be replaced : ");

c=in.next();

pos=al.indexOf(c);

if(pos<0)

System.out.println("String not found!");

else

{

System.out.println("Enter the new string : ");

c=in.next();

al.set(pos,c);

System.out.println(al);

}

break;

case 5:System.out.println("Enter the string to be searched : ");

c=in.next();

if(al.contains(c))

System.out.println("Element found!");

else

System.out.println("Element not found!");

break;

case 6:System.out.println("Enter the string : ");

c=in.next();

if(al.contains(c))

{

pos=al.indexOf(c);

System.out.println("Element found at "+pos+1);

}

else

System.out.println("Element not found!");

break;

case 7:itr=al.iterator();

//System.out.println(itr);

while(itr.hasNext())

{

c=(String)itr.next();

if(c.charAt(0)=='a')

System.out.println(c);

}

break;

case 8:System.out.println("Enter the no of elements of the new array : ");

n=in.nextInt();

System.out.println("Enter the elements of the new array to be appended : ");

while(i<n)

{

System.out.println("Enter the string to be appended");

c=in.next();

al1.add(c);

i++;

}

itr=al1.iterator();

while(itr.hasNext())

{

c=(String)itr.next();

al.add(c);

}

System.out.println("Appended Array : ");

System.out.println(al);

break;

case 9:System.out.println(al);

break;

case 10:break;

}

}while(ch!=10);

}

}

SAMPLE INPUT AND OUTPUT:

C:\java>javac arrayl.java

C:\java>java arrayl

String Operations

1.Append

2.Insert

3.Delete

4.Replace

5.Search

6.Index Of

7.Strings starting with a

8.Append list

9.Display

10.Exit

Enter your choice :

2

Enter the string to be inserted :

hello

Enter the position to be inserted :

0

[hello]

String Operations

1.Append

2.Insert

3.Delete

4.Replace

5.Search

6.Index Of

7.Strings starting with a

8.Append list

9.Display

10.Exit

Enter your choice :

1

Enter the string to be appended

compare

[hello, compare]

String Operations

1.Append

2.Insert

3.Delete

4.Replace

5.Search

6.Index Of

7.Strings starting with a

8.Append list

9.Display

10.Exit

Enter your choice :

3

Enter the string to be deleted :

hello

[compare]

String Operations

1.Append

2.Insert

3.Delete

4.Replace

5.Search

6.Index Of

7.Strings starting with a

8.Append list

9.Display

10.Exit

Enter your choice :

4

Enter the string to be replaced :

compare

Enter the new string :

collect

[collect]

String Operations

1.Append

2.Insert

3.Delete

4.Replace

5.Search

6.Index Of

7.Strings starting with a

8.Append list

9.Display

10.Exit

Enter your choice :

5

Enter the string to be searched :

collect

Element found!

String Operations

1.Append

2.Insert

3.Delete

4.Replace

5.Search

6.Index Of

7.Strings starting with a

8.Append list

9.Display

10.Exit

Enter your choice :

9

[collect]

String Operations

1.Append

2.Insert

3.Delete

4.Replace

5.Search

6.Index Of

7.Strings starting with a

8.Append list

9.Display

10.Exit

Enter your choice :