5. Write a program to perform string operations using ArrayList. Write functions for the following

a. Append - add at end

b. Insert – add at particular index

c. Search

d. List all string starts with given letter

**PROGRAM**

import java.util.\*;

import java.io.\*;

public class arraylistexample

{

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

{

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

DataInputStream in=new DataInputStream(System.in);

int c,ch;

int i,j;

String str,str1;

do

{

System.out.println("STRING MANIPULATION");

System.out.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

System.out.println(" 1. Append at end \t 2.Insert at particular index \t 3.Search \t");

System.out.println( "4.List string that starting with letter \t");

System.out.println("5.Size \t 6.Remove \t 7.Sort\t 8.Display\t" );

System.out.println("Enter the choice ");

c=Integer.parseInt(in.readLine());

switch(c)

{

case 1:

{

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

str=in.readLine();

obj.add(str);

break;

}

case 2:

{

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

str=in.readLine();

System.out.println("Specify the index/position to insert");

i=Integer.parseInt(in.readLine());

obj.add(i-1,str);

System.out.println("The array list has following elements:"+obj);

break;

}

case 3:

{

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

str=in.readLine();

j=obj.indexOf(str);

if(j==-1)

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

else

System.out.println("Index of:"+str+"is"+j);

break;

}

case 4:

{

System.out.println("Enter the character to List string that starts with specified character");

str=in.readLine();

for(i=0;i<(obj.size()-1);i++)

{

str1=obj.get(i);

if(str1.startsWith(str))

{

System.out.println(str1);

}

}

break;

}

case 5:

{

System.out.println("Size of the list "+obj.size());

break;

}

case 6:

{

System.out.println("Enter the element to remove");

str=in.readLine();

if(obj.remove(str))

{

System.out.println("Element Removed"+str);

}

else

{

System.out.println("Element not present");

}

break;

}

case 7:

{

Collections.sort(obj);

System.out.println("The array list has following elements:"+obj);

break;

}

case 8:

{

System.out.println("The array list has following elements:"+obj);

break;

}

}

System.out.println("enter 0 to break and 1 to continue");

ch=Integer.parseInt(in.readLine());

}while(ch==1);

}

}

**OUTPUT**

