# **ARRAY LIST**

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#### AIM:

To develop a java console application to perform string operations.

## **REQUIREMENTS:**

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

#### **ALGORITHM:**

**Step1:** Declare a package String Collections.

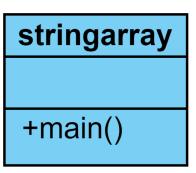
**Step2**: Create the string array class and put the operation for array list.

**Step3**: Create a separate operation for append

**Step4**: Ask the user to get the option for processing the operation.

**Step5**: Display the result.

#### **CLASS DIAGRAM:**



#### **PROGRAM:**

```
/******
* created by rohitha
* Gmail: rohithakorrapati21@gmail.com
* program to find string
*/
```

## package stringcollections;

```
import java.util.ArrayList;
import java.util.Scanner;
public class stringarray {
    public static void main(String[] args) {
        int option;
        int index,i;
        String n;
        Scanner sc=new Scanner(System.in);
        ArrayList<String> str;
        str=new ArrayList<String>();
    while(true)
    {
        System.out.println("1. To add an String number at the end");
        System.out.println("2. To insert an string number at
particular index");
        System.out.println("3. To search for a string");
        System.out.println("4. To display all the string");
        System.out.println("5. Exit");
        System.out.print("Enter your choice:");
        option=sc.nextInt();
        switch(option)
        {
        case 1:
            System.out.print("Enter a String:");
            n=sc.next();
            str.add(n);
            System.out.println("The given String is added at the
end");
            break;
        case 2:
            System.out.print("Enter a String:");
            n=sc.next();
            System.out.print("Enter the index:");
            index=sc.nextInt();
            str.add(index,n);
            System.out.println("The given String is added at the given
index");
            break;
        case 3:
            System.out.print("Enter a String:");
            n=sc.next();
            index=str.indexOf(n);
            if(index<0)</pre>
            {
```

```
System.out.println("The given String is not available
in the list");
            }else
            {
                System.out.printf("The String %s is found at the index
%d\n" ,str,index);
            break;
        case 4:
                    char 1;
           System.out.println("Enter the starting letter: ");
                      l=sc.next().charAt(0);
                 for(i=0;i<str.size();i++)</pre>
                 {
                      String str1 = str.get(i);
                      if(l==str1.charAt(0))
                      System.out.println(str1);
                 }
                      break;
        case 5:
            System.out.println("Thankyou for using String list
application !!!");
            break:
        default:
            System.out.println("Please enter a valid String !!!");
        }
        if(option==5)
        {
            break;
        }
    }
}
OUTPUT:
1. To add an String number at the end
2. To insert an string number at particular index
3. To search for a string
4. To find the string starting with
5. Exit
Enter your choice:1
Enter a String:shree
The given String is added at the end
```

- 1. To add an String number at the end
- 2. To insert an string number at particular index
- 3. To search for a string
- 4. To find the string starting with
- 5. Exit

Enter your choice:1
Enter a String:oiii

The given String is added at the end

- 1. To add an String number at the end
- 2. To insert an string number at particular index
- 3. To search for a string
- 4. To find the string starting with
- 5. Exit

Enter your choice:1
Enter a String:sri

The given String is added at the end

- 1. To add an String number at the end
- 2. To insert an string number at particular index
- 3. To search for a string
- 4. To find the string starting with
- 5. Exit

Enter your choice:2 Enter a String:sai Enter the index:1

The given String is added at the given index

- 1. To add an String number at the end
- 2. To insert an string number at particular index
- 3. To search for a string
- 4. To find the string starting with
- 5. Exit

Enter your choice:3

Enter a String:b

The given String is not available in the list

- 1. To add an String number at the end
- 2. To insert an string number at particular index
- 3. To search for a string
- 4. To find the string starting with
- 5. Exit

Enter your choice:4

Enter the starting letter:

b

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- 1. To add an String number at the end
- 2. To insert an string number at particular index
- 3. To search for a string
- 4. To find the string starting with

5. Exit	
Enter your choice:5	
Thankyou for using String list application	!!!

## **RESULT:**

Thus the java Program is created to find the string in array is executed and the output is verified.