

Ex No: 4	ARRAY LIST
Date: 16/08/2019	

## AIM:

\* To create an array of strings and append a string at the end and search for a string to sort a string from array.

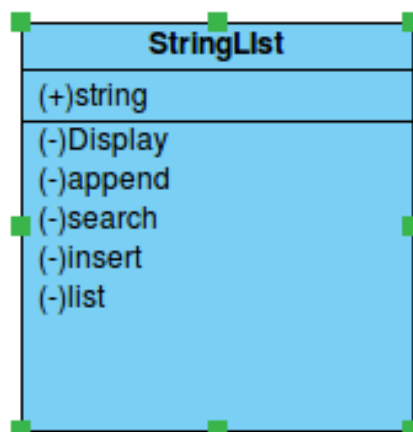
## REQUIREMENTS:

- \* To add a string to the array at the end.
- \* To insert a string at particular index.
- \* To search for a string in array.
- \* To sort a string with a particular index.

## ALGORITHM:

1. Create a package stringcollection.
2. Create a class StringList.
3. Declare array of string structure.
4. Define the requirement in different cases.
5. Declare case(1) for appending a string to the array.
6. Declare case(2) for inserting a string at a particular index.
7. Declare case(3) for searching a string.
8. Declare case(4) to display all the strings starts with given letter.
9. Declare case(5) to display all the strings.
10. Stop.

## CLASS DIAGRAM:



/\*\*

```
package Stringcollection;
```

```
System.out.print("Enter a String:");
```

```

        n=sc.next();
        System.out.print("Enter the index:");
        index=sc.nextInt();
        nums.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=nums.indexOf(n);
        if(index<0)
        {
            System.out.println("The given String is not
available in the list");
        }else
        {
            System.out.printf("The String %s is found at
the index %s\n",n,index);
        }
        break;
    case 4:
        System.out.println("Enter a letter:");
        a=sc.next();

        for(i=0;i<nums.size();i++)
        {
            if(nums.get(i).startsWith(a))
            {
                System.out.println(nums.get(i));
            }
        }
        break;
    case 5:
        System.out.println("The available strings are:");
        for(i=0;i<nums.size();i++)
        {
            System.out.println(nums.get(i));
        }
        break;

    case 6:
        System.out.println("Thankyou for using string list
application !!!");
        break;
    default:
        System.out.println("Please enter a valid
Sting!!!");
}

```

```

        if(option==6)
        {
            break;
        }
    }

}
}

```

## OUTPUT:

```

1. To add an String  at the end
2. To insert an String at particular index
3. To search for a String
4. To display with letter
5. display all
6. Exit
Enter your choice:1
Enter a String:tamil
The given String is added at the end
1. To add an String  at the end
2. To insert an String at particular index
3. To search for a String
4. To display with letter
5. display all
6. Exit
Enter your choice:2
Enter a String:selvan
Enter the index:0
The given String is added at the given index
1. To add an String  at the end
2. To insert an String at particular index
3. To search for a String
4. To display with letter
5. display all
6. Exit
Enter your choice:3
Enter a String:tamil
The String tamil is found at the index 1
1. To add an String  at the end
2. To insert an String at particular index
3. To search for a String
4. To display with letter
5. display all
6. Exit
Enter your choice:4
Enter a letter:
t
tamil
1. To add an String  at the end
2. To insert an String at particular index
3. To search for a String
4. To display with letter
5. display all
6. Exit
Enter your choice:5
The available strings are:

```

```
selvan  
tamil  
1. To add an String at the end  
2. To insert an String at particular index  
3. To search for a String  
4. To display with letter  
5. display all  
6. Exit  
Enter your choice:6  
Thankyou for using string list application !!!
```

## RESULT:

Thus the Java program to create ArrayList using StringList is written and executed successfully.