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| **EX: 04** | **STRING COLLECTION APPLICATION** |
| **16-08-19** |

**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:**

Step 1: Create class StringList with static main function in package stringcollection.

Step 2: Use switch case to perform necessary tasks.

Step 3: Use add() method to add a string.

Step 4: Use same add() method to add a string at particular index.

Step 5: Use indexOf() method to search for a string.

Step 6: Compare first letter of the strings from the list with the entered letter and display those

particular strings.

Step 7: Exit

**Class Diagram:**

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**Program:**

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\*/

package stringcollection;

import java.util.\*;

public class StringList {

public static void main(String[] args) {

int option;

String n;

int index ,i;

Scanner sc=new Scanner(System.in);

ArrayList<String> str;

str=new ArrayList<String>();

while(true)

{

System.out.println("1. To add an String at the end");

System.out.println("2. To insert an String 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)

{

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",n,index);

}

break;

case 4:

System.out.println("The available String are:");

for(i=0;i<str.size();i++)

{

System.out.println(str.get(i));

}

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 at the end

2. To insert an String at particular index

3. To search for a String

4. To display all the String

5. Exit

Enter your choice:1

Enter a String:Abhijith

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 all the String

5. Exit

Enter your choice:2

Enter a String:Abhijith

Enter the index:1

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 all the String

5. Exit

Enter your choice:4

The available String are:

karthikeyan

karthi

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 all the String

5. Exit

Enter your choice:

**RESULT:**

Thus the java program to perform String Operations is executed and

its output is verified successfully.