# Experiment-2.3

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**Semester**: 6TH
**Date of Performance:**05/03/2024
**Subject Name:** Project Based learning with Java
**Subject Code:** 21CSH-319

1. **Aim:** Write a Program to perform the basic operations like insert, delete, display and search in list. List contains String object items where these operations are to be performed.

2. **Objective:** The objective of Program is to perform the basic operations like insert, delete, display and search in list. List contains String object items where these operations are to be performed.

## 3. Algorithm/Approach/Code:

```
import java.util.*;

public class StringOperations {
    public static void main(String[] args) {
        ArrayList<String> stringList = new ArrayList<>();
        Scanner scanner = new Scanner(System.in);

        int choice;
        do {
            System.out.println("1. Insert");
            System.out.println("2. Search");
            System.out.println("3. Delete");
```

```
            System.out.println("4. Display");
            System.out.println("5. Exit");
            System.out.print("Enter your choice: ");
            choice = scanner.nextInt();

            switch (choice) {
                case 1:
                    insert(stringList, scanner);
                    break;
                case 2:
                    search(stringList, scanner);
                    break;
                case 3:
                    delete(stringList, scanner);
                    break;
                case 4:
                    display(stringList);
                    break;
                case 5:
                    System.out.println("Exiting...");
                    break;
                default:
                    System.out.println("Invalid choice. Please try again.");
                    break;
            }
        } while (choice != 5);
    }
```

```
public static void insert(ArrayList<String> list, Scanner scanner) {
    System.out.print("Enter the string to insert: ");
    String item = scanner.next();
    list.add(item);
    System.out.println("String inserted successfully.");
}

public static void search(ArrayList<String> list, Scanner scanner) {
    System.out.print("Enter the string to search: ");
    String item = scanner.next();
    if (list.contains(item)) {
        System.out.println("String found in the list.");
    } else {
        System.out.println("String not found in the list.");
    }
}

public static void delete(ArrayList<String> list, Scanner scanner) {
    System.out.print("Enter the string to delete: ");
    String item = scanner.next();
    if (list.remove(item)) {
        System.out.println("String deleted successfully.");
    } else {
        System.out.println("String not found in the list.");
    }
}

public static void display(ArrayList<String> list) {
```

```
            System.out.println("List of strings:");
            for (String item : list) {
                System.out.println(item);
            }
        }
    }
```

## 4. Output:


## 5. Learning Outcomes:

1) Array of list to store multiple string Information
2) Oops concept
3) Switch Statements