1- Create a list of String and print the values in reverse order
Input – Java, Selenium, TestNG, Git, Github
Output- Github, Git, TestNG, Selenium, Java

Ans:

```
import java.util.ArrayList;

public class AssignmentTasklist1 {

	public static void main(String[] args) {

		// Create a list of String and print the values in reverse order
		// Input – Java, Selenium, TestNG, Git, Github, c++
		// Output- Github, Git, TestNG, Selenium, Java

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

		input.add("Java");
		input.add("Selenium");
		input.add("TestNG");
		input.add("Git");
		input.add("Github");

		System.out.println("Original Array List : ");

		for (int i = 0; i < input.size(); i++) {
			System.out.println(input.get(i));

		}

		System.out.println();
		System.out.println();
		System.out.println("Reverse Array List : ");
		for (int i = input.size() - 1; i >= 0; i--) {

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

		}
```

```
	}

}
```

Output:
Original Array List :
Java
Selenium
TestNG
Git
Github

Reverse Array List :
Github
Git
TestNG
Selenium
Java

2>Write a program which will accept List of String and produce another List of string of which will have only values which starts with git

Input – Git, Github, GitLab,GitBash, Selenium, Java, Maven
Output- Git, Github, Gitlab, GitBash

Ans:

```
import java.util.ArrayList;

public class AssignmentTasknew6 {

	public static void main(String[] args) {
		/*
		 * Write a program which will accept List of String and produce another
		 * List of string of which will have only values which starts with git
		 * Input – Git, Github, GitLab,GitBash, Selenium, Java, Maven Output-
		 * Git, Github, Gitlab, GitBash
		 */
		ArrayList<String> str1 = new ArrayList<String>();
```

```
                str1.add("Git");
                str1.add("Github");
                str1.add("GitLab");
                str1.add("GitBash");
                str1.add("Java");
                str1.add("Maven");

                System.out.println("List of elements: ");
                for (int i = 0; i < str1.size(); i++) {
                        System.out.println(str1.get(i));

                }
                System.out.println("  ");

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

                System.out.println("List of elements start with Git : ");
                for (int i = 0; i < str1.size(); i++) {
                        if (str1.get(i).startsWith("Git")) {
                                output.add(str1.get(i));
                                System.out.println(output.get(i));

                        }
                }

        }

}
```

Output:
List of elements:
Git
Github
GitLab
GitBash
Java
Maven

List of elements start with Git :
Git
Github
GitLab
GitBash

3>Write a program that will remove duplicate values from List
Input – Java, TestNG, Maven, Java,
Output – Java, TestNG, Maven

Ans:

```
import java.util.ArrayList;

public class AssignmentTasknew8 {

	public static void main(String[] args) {
		// Write a program that will remove duplicate values from List
		// Input – Java, TestNG, Maven, Java,
		// Output – Java, TestNG, Maven

		// Get the ArrayList with duplicate values
		ArrayList<String> list = new ArrayList<String>();

		list.add("Java");
		list.add("TestNg");
		list.add("Maven");
		list.add("Java");

		// Create another ArrayList
		ArrayList<String> newlist = new ArrayList<>();

		// Run for each loop to itrate through each element of duplicate list
		// and store in new empty list

		for (String pl : list) {
			if (!newlist.contains(pl))
				newlist.add(pl);
```

```
		}

		System.out.println("List of removed duplicate values : ");
		// retrieve element from obj
		for (String upl : newlist) {

			System.out.println(upl);
		}

	}

}
```

Output:
List of removed duplicate values :
Java
TestNg
Maven

4>Create a list of values and print the second element, second last element.
Input – 10,45, 90,45, 23, 90, 44
Output – 45,90

Ans:

```
import java.util.ArrayList;

public class AssignmentTasknew7 {

	public static void main(String[] args) {
		// Create a list of values and print the second element, second last
		// element.
		// Input – 10,45, 90,45, 23, 90, 44
		// Output – 45,90

		ArrayList<Integer> numbers = new ArrayList<Integer>();

		numbers.add(10);
		numbers.add(45);
```

```
        numbers.add(90);
        numbers.add(45);
        numbers.add(23);
        numbers.add(90);
        numbers.add(44);

        System.out.println("Input List : " + numbers);

        int secondelement = numbers.get(1);

        System.out.println("Second Element :" + secondelement);

        int secondlastelement = numbers.get(numbers.size() - 2);

        System.out.println("Second Last Element :" + secondlastelement);

    }

}
```

Output:
Input List : [10, 45, 90, 45, 23, 90, 44]
Second Element :45
Second Last Element :90

5>Create a list which can accept another list as an element.
List 1- 11,22,33
List 2- 9,19,29
List 3- 7,17,27

Ans:

```
package assignments;

import java.util.ArrayList;
import java.util.Arrays;
import java.util.List;

public class AssignmentTask11 {
```

```
	public static void main(String[] args) {
		// Create a list which can accept another list as an element.
		// List 1- 11,22,33
		// List 2- 9,19,29
		// List 3- 7,17,27

		List<List<Integer>> alllist = new ArrayList<>();

		List<Integer> l1 = Arrays.asList(11, 22, 33);
		List<Integer> l2 = Arrays.asList(9, 19, 29);
		List<Integer> l3 = Arrays.asList(7, 17, 27);

		alllist.add(l1);
		alllist.add(l2);
		alllist.add(l3);

		System.out.println(alllist);

	}

}
```

Output:

```
[[11, 22, 33], [9, 19, 29], [7, 17, 27]]
```