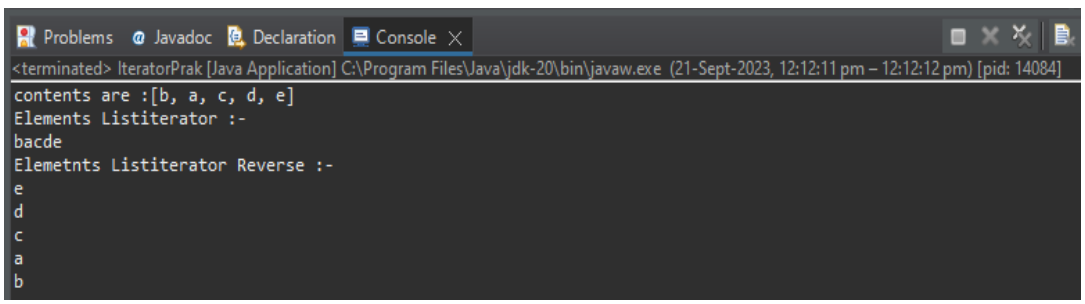
PRACTICAL NO. 1

Write a java program to create a list containing list of items and use Listiterator interface to print the items in the list. Also print the list in reverse / backword direction .

Code:-

```
package practical.aj;

import java.util.ArrayList;

import java.util.ListIterator;

public class IteratorPrak {

	public static void main(String[] args) {

		// TODO Auto-generated method stub

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

	str.add("b");	str.add("a");

	str.add("c");	str.add("d");

	str.add("e");

	System.out.println("contents are :" +str);

	ListIterator<String> ltr=str.listIterator() ;

		while(ltr.hasNext()) {

			String element=ltr.next();

			System.out.print(element + " ");		}

		System.out.println();

		while(ltr.hasPrevious()) {String element = ltr.previous();

		System.out.println(element + " ")}}}
```

Output:-

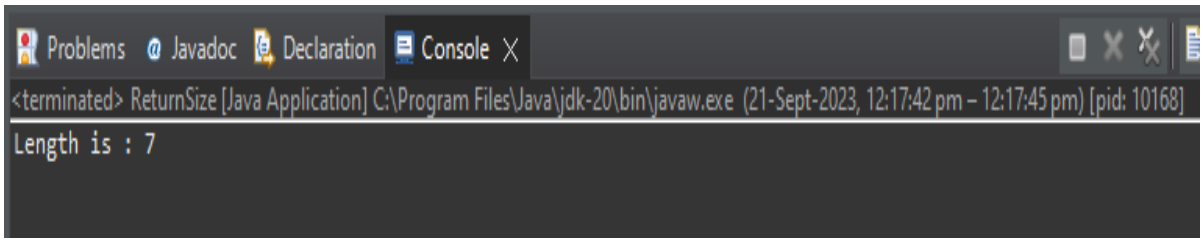


Create a lambda expression that takes a string as a parameter and returns the length of the String.

Code:-

```
package practical.aj;

interface DemoInt{

public void sizeR(String a);

}

public class ReturnSize {

	public static void main(String[] args) {

		DemoInt objS =(a) -> {

			System.out.println("Length is : "+ a.length());

				};

		objS.sizeR("Bhushan");

}

}
```

Output :-



Write a Java program using Set interface containing list of items and perform the following operations:

a. Add items in the set.

b. Insert items of one set into other set.

c. Print the list in reverse/backward direction.

d. Remove items from the set

e. Search the specified item in the set

Code:-

```
public class SetPrac {
	public static void main(String[] args) {
		// TODO Auto-generated method stub
		HashSet<Integer> hst =new HashSet<Integer>();
//Adding items in set using add method
		hst.add(1);
		hst.add(2);	hst.add(3);
		hst.add(4);	hst.add(5);
//To display elements
		System.out.println("Elements are :" + hst);
		HashSet<Integer> hst1 =new HashSet<Integer>();
//Inserting items from one set to another set
		hst1.addAll(hst);
		System.out.println("Elements of copied Hashset are :" + hst1);
		System.out.println();
//Removing item for a set using Remove method
		System.out.println("set before removing 4: "+hst);
		hst.remove(4);
		System.out.println("set after removing 4 :"+hst);
```

```
                System.out.println();
//Searching for a item  using Contains method
                System.out.println("Searching for item 5");
                System.out.println(hst.contains(5));
                System.out.println();
//Reversing an set
                ArrayList<Integer> lst = new ArrayList<Integer>();
                lst.addAll(hst);
                ListIterator<Integer> ltr1 = lst.listIterator();
                while(ltr1.hasPrevious()) {
                        Integer element =ltr1.previous();
                        System.out.println(element + "");
                }

        }
}
```

Output :-