Assignment No - 01 :- Write a Java program to remove a specified element from a linked list.

i) The Java.util.LinkedList.remove() method is used to remove an element from a linked list. The element is removed from the beginning of head of the linked list

Syntax :- LinkedList.remove()

Return Value: This method returns the head of the list or the element present at the head of the list.

ii) The Java.util.LinkedList.remove(int index) method is used to remove an element from a linked list from a specific position or index

Syntax: LinkedList.remove(int index)

Return value: This method returns the element that has just been removed from the list

Parameters: The parameter index is at integer data type and specifies the position of the element to be removed from the LinkedList.

Program (Source Code):-

```
package assignment.pkg01;
import java.util.*;
public class Assignment01 {
    public static void main(String[] args){
        List<String> words = new ArrayList<String>();
        words.add("Saturday");
        words.add("Sunday");
        words.add("Monday");
        words.add("Tuesday");
        words.add("Wednesday");

        System.out.println("The original linked list: "
                + words);
        words.remove("Monday");
        System.out.println("After removed the specific
                string the linked list: " + words);

        words.remove(2);
        System.out.println("After removed the specific
                index the linked list: " +words);

    }
}
```

Sample Output :-

The original linked list : [Saturday, Sunday, Monday, Tuesday, Wednesday

After removed the specific string the list : [Saturday, Sunday, Tuesday, Wednesday]

After removed the specific index the linked list : [Saturday, Sunday, Wednesday]

Assignment No-02:- Write a Java program to join two linked list.

Program (Source Code):-

```
package assignment02;
import java.util.*;
public class Assignment02 {
    public static void main(String[] args) {
        List<String> l1 = new ArrayList<String>();
        l1.add("Saturday");
        l1.add("Sunday");
        l1.add("Monday");
        l1.add("Tuesday");
        System.out.println("First linked list : " +l1);

        List<String> l2 = new ArrayList<String>();
        l2.add("Wednesday");
        l2.add("Thursday");
        l2.add("Friday");
        System.out.println("Second linked list : " +l2);

        List<String> joinlist = new ArrayList<String>();
        joinlist.addAll(l1);
        joinlist.addAll(l2);
        System.out.println("After joined two linked list:"
                + joinlist);

    }
}
```

Sample Output:-

First linked list : [Saturday, Sunday, Monday, Tuesday]
Second linked list: [Wednesday, Thursday, Friday]
After joined two linked list : [Saturday, Sunday, Monday,
Tuesday, Wednesday, Thursday, Friday]

Assignment No-03:- Write a Java program to print all the elements of a ArrayList using the position of the elements.

Programe (Source Code):-

```
package assignment03;
import java.util.*;
public class Assignment03{
    public static void main(String[] args){
        List<String> words = new ArrayList<String>();
        words.add("Saturday");
        words.add("Sunday");
        words.add("Monday");
        words.add("Tuesday");
        words.add("Wednesday");
        words.add("Thursday");
        words.add("Friday");
        System.out.println("Original array list:"+words);
        System.out.println("Print all the elements of
                an ArrayList using the position of the
                elements:");
        int EleNo = words.size();
        int inden;
        for(inden=0; inden<EleNo; inden++)
            System.out.println(words.get(inden));
    }
}
```

Simple Output :-

Original array list : [Saturday, Sunday, Monday, Tuesday, Wednesday, Thursday, Friday]

Print all the elements of an ArrayList using the position of the elements:

Saturday
Sunday
Monday
Tuesday
Wednerday
Thursday
Friday.

Assignment No-04:- Create a custom exception class and provides a solution to use that exception.

Program (Source Code):-

```
package assignment04;
import java.util.*;
class MyException extends Exception
{
}
public class Assignment04{
    public static void main(String[] args){
        try
        {
            throw new MyException();
        }
        catch(MyException e)
        {
            System.out.println("This is a custom exception.");
            System.out.println("Message: " +e.getMessage());
        }
    }
}
```

Sample Output :-

```
This is a custom exception.
Message: null.
```