

## JAVA(END TERM EXAM)

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Panel -B

Roll no – 17

### problem statement :

write a java program

- create a new linked list
- iterate a linked list in reverse order
- insert some element at specified position
- remove first and last element from linked list
- swap two element in a linked list
- replace an element in a linked list

### code:

```
import java.util.*;
public class ll {

    public static void main(String[] args) {
        System.out.println("1> Creating a new Linked List :");
        LinkedList l = new LinkedList();
        l.add(0, "m");
        l.addLast("a");
        l.addLast("d");
        l.addLast("a");
        l.addLast("m");
        System.out.println("yipeee!! \nlinked list has been created");
        Scanner s = new Scanner(System.in);
        System.out.println("2> Iterating list in reverse order :");
        int i;
        int length ;
        length= l.size();
        for(i=length-1 ; i>=0 ;i--)
        {
            System.out.print(l.get(i));
        }
        System.out.println("");
        System.out.println("3> Inseting element at specified position :");
        System.out.print("Enter position to insert data: ");
        int pos = s.nextInt();
        System.out.print("Enter data to insert: ");
        String a = s.next();
        l.add(pos, a);
        length= l.size();
        for(i=0 ; i<length ;i++)
        {
            System.out.print(l.get(i));
        }
        System.out.println("");
        System.out.println("4> Removing first and last element:");
        System.out.println("Removing first and last element");
        l.removeFirst();
        l.removeLast();
        length= l.size();
        for(i=0 ; i<length ;i++)
        {
```

```

        System.out.print(l.get(i));
    }
    System.out.println("");
    System.out.println("5> Swapping elements :");
    System.out.print("Enter first position to swap:");
    int pos1 = s.nextInt();
    System.out.print("Enter second position to swap:");
    int pos2 = s.nextInt();
    Object temp;
    temp = l.get(pos1);
    l.remove(pos1);
    l.add(pos1,l.get(pos2-1));
    l.remove(pos2);
    l.add(pos2,temp);
    length= l.size();
    for(i=0 ; i<length ;i++)
    {
        System.out.print(l.get(i));
    }
    System.out.println("");
    System.out.println("6> Replacing an element :");
    System.out.print("Enter position to replace:");
    int pos3 = s.nextInt();
    System.out.print("Enter data to replace: ");
    String b = s.next();
    l.remove(pos3);
    l.add(pos3,b);
    length= l.size();
    for(i=0 ; i<length ;i++)
    {
        System.out.print(l.get(i));
    }
    System.out.println("");
    s.close();
}
}
}

```

## output:

### 1> Creating a new Linked List :

yipeee!!

linked list has been created

### 2> Iterating list in reverse order :

madam

### 3> Inseting element at specified position :

Enter position to insert data: 2

Enter data to insert: q

maqdam

### 4> Removing first and last element:

Removing first and last element

aqda

### 5> Swapping elements :

Enter first position to swap:1

Enter second position to swap:2

adqa

### 6> Replacing an element :

Enter position to replace:0

Enter data to replace: c  
cdqa