

## Daily Work Practice:- Date – 16/8/2023

### Problem: Intersection of two linked lists

```
package com.ishwarchavan;
import java.util.*;
import java.io.*;
public class Intersection {           //class created
    static class Node{
        int data;           //linked list pointer created
        Node next;
        Node(int d)
        {
            data = d;
            next = null;
        }
    }
    public Node getIntersectionNode(Node head1, Node head2) {           //function is
//created here for to get the intersection of two linked list
        while(head2 != null) {           //cheeking condition
            Node temp = head1;
            while(temp != null) {
                if(temp == head2) {           //if both nodes are same
                    return head2;           //return head2
                }
                temp =temp.next;
            }
            head2 =head2.next;
        }           //if intersection is not possible then return
//null
        return null;
    }
    public static void main(String[] args) {           //main program started
        Intersection list = new Intersection();
        Node head1, head2;
//created two linked list
        head1 =new Node(10);
        head2 = new Node(3);
        Node newNode = new Node(6);
        head2.next = newNode;
        newNode = new Node(9);
        head2.next.next = newNode;
        newNode = new Node(15);
        head1.next = newNode;
        head2.next.next.next = newNode;
        newNode = new Node(30);
        head1.next.next = newNode;
        head1.next.next.next = null;
        Node intersectionPoint = list.getIntersectionNode(head1, head2);
        if(intersectionPoint == null) {           // if satisfid this
//condition then execute below statement
            System.out.println("No Intersection Point");
        }else {           // other wise print the
//below statement
            System.out.println("Intersection Point: "+
//intersectionPoint.data);
        }
    }
}
```

## Program: Factorial of Trailing Zeroes

```
package com.ishwarchavan;

public class FactorialOfTrailingZeroes {

    public static int countTrailingZeroes(int n) {           //function is created to
find trailing zeroes

        int count = 0;           //initialize and declare count with 0

        for(int i=1; i<= n; i++) {           //loops iterating
            int j =i;
            while(j % 5 == 0) {           //if true then increment
                count++;
                j /=5;
            }
        }
        return count;           //if false then return count
    }

    public static void main(String[] args) {           //main program started
        int n = 10;
        System.out.println(countTrailingZeroes(n));
    }
}
```