9/1/2024

FAHEEM AKBAR

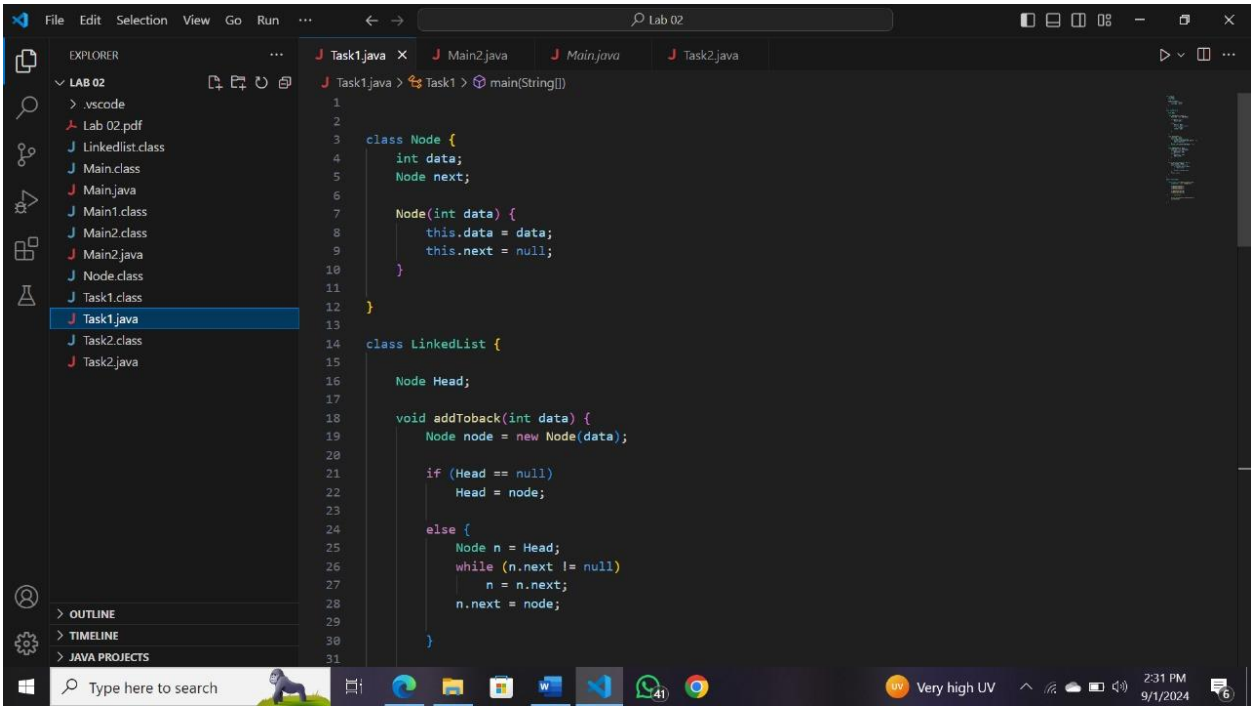
DSA Lab: 02 Solution

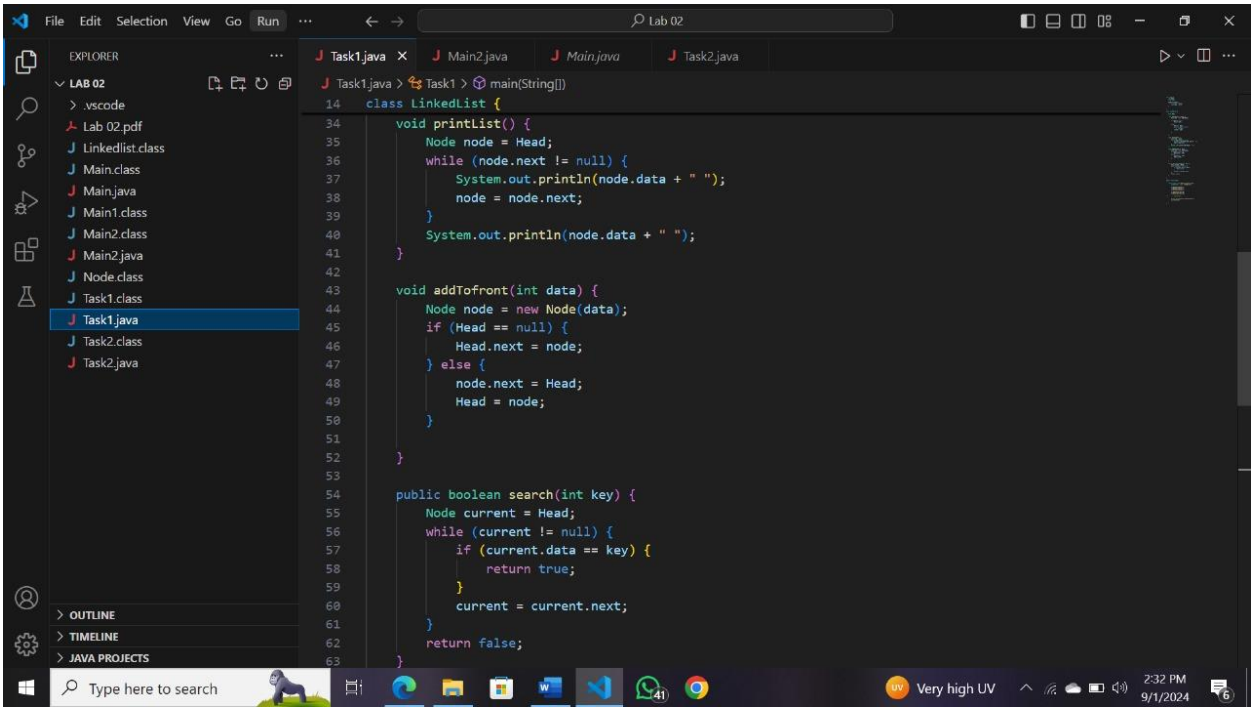
CMS ID: 023-23-0365

DSA LAB 02 || SUBMITTED TO MA'AM MARINA GUL

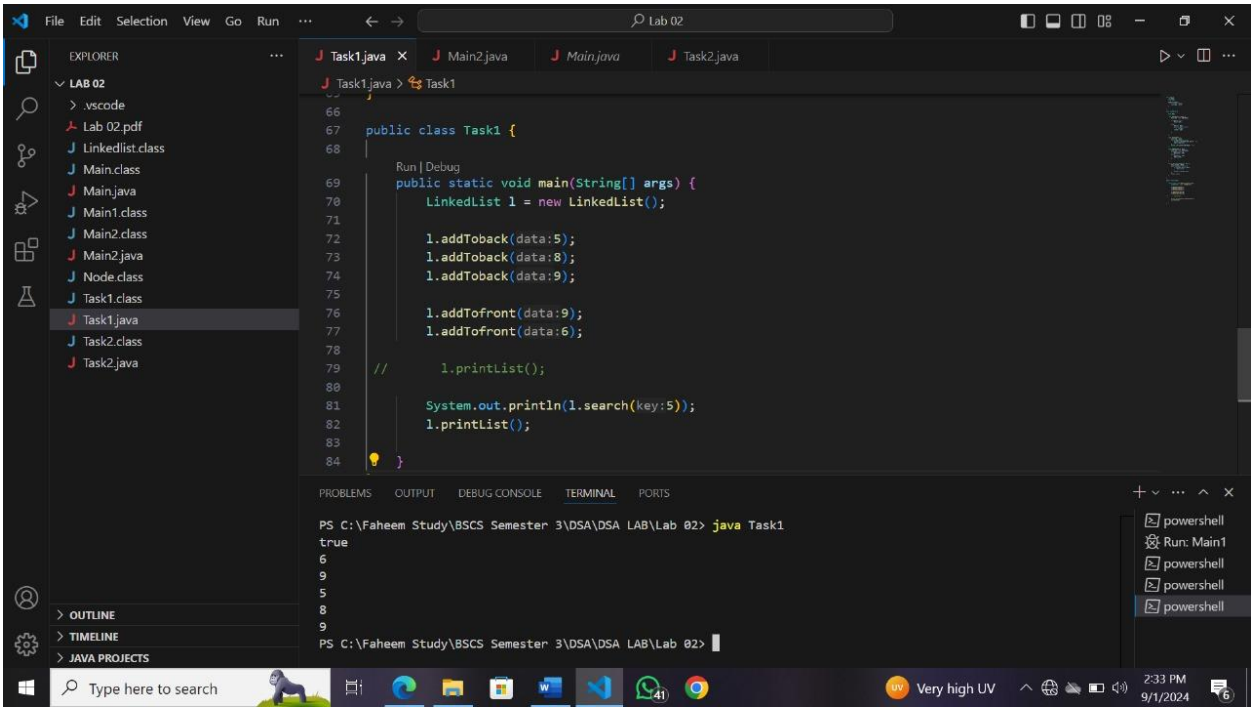
Task 01: Search number in Linked List

Solution:



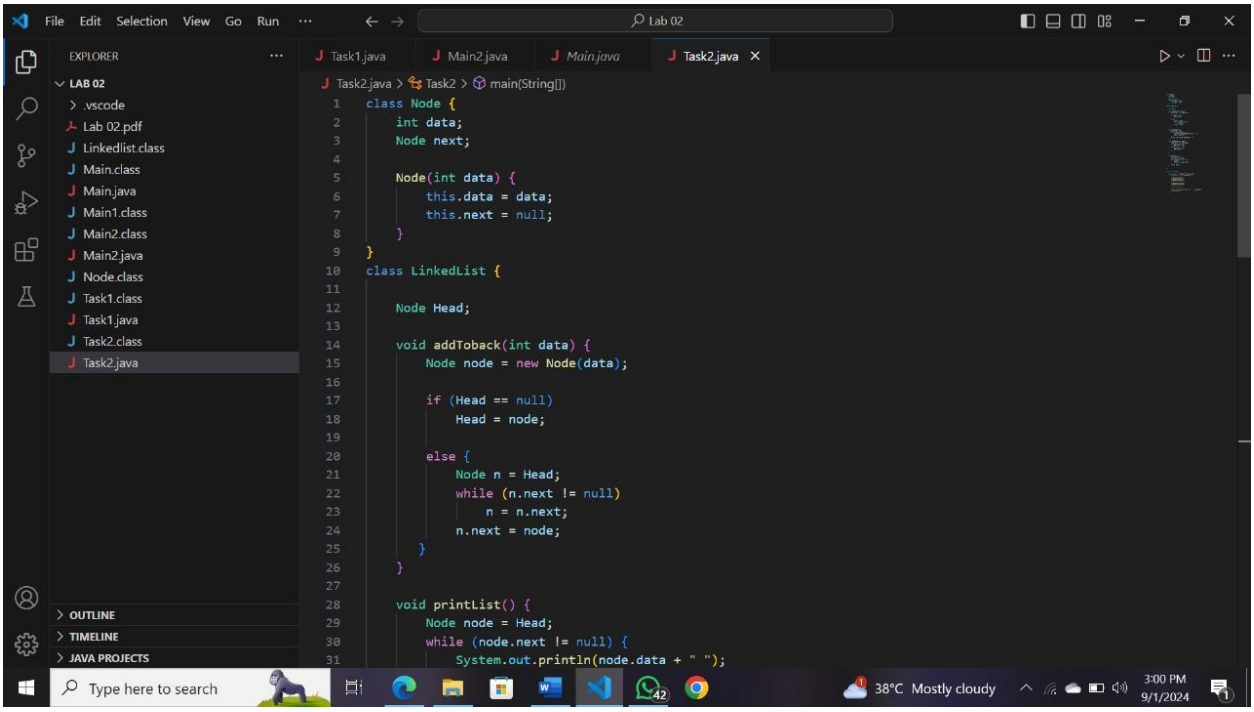


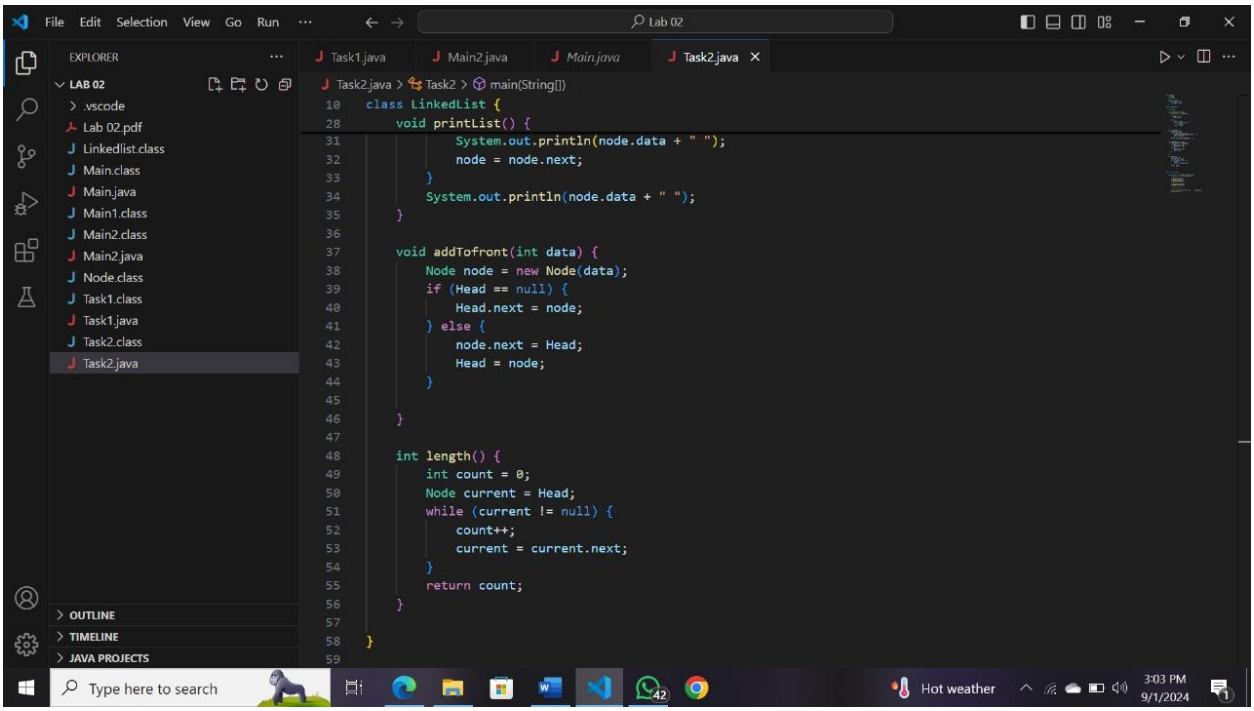
Output



Task 2: Find length of Linked List

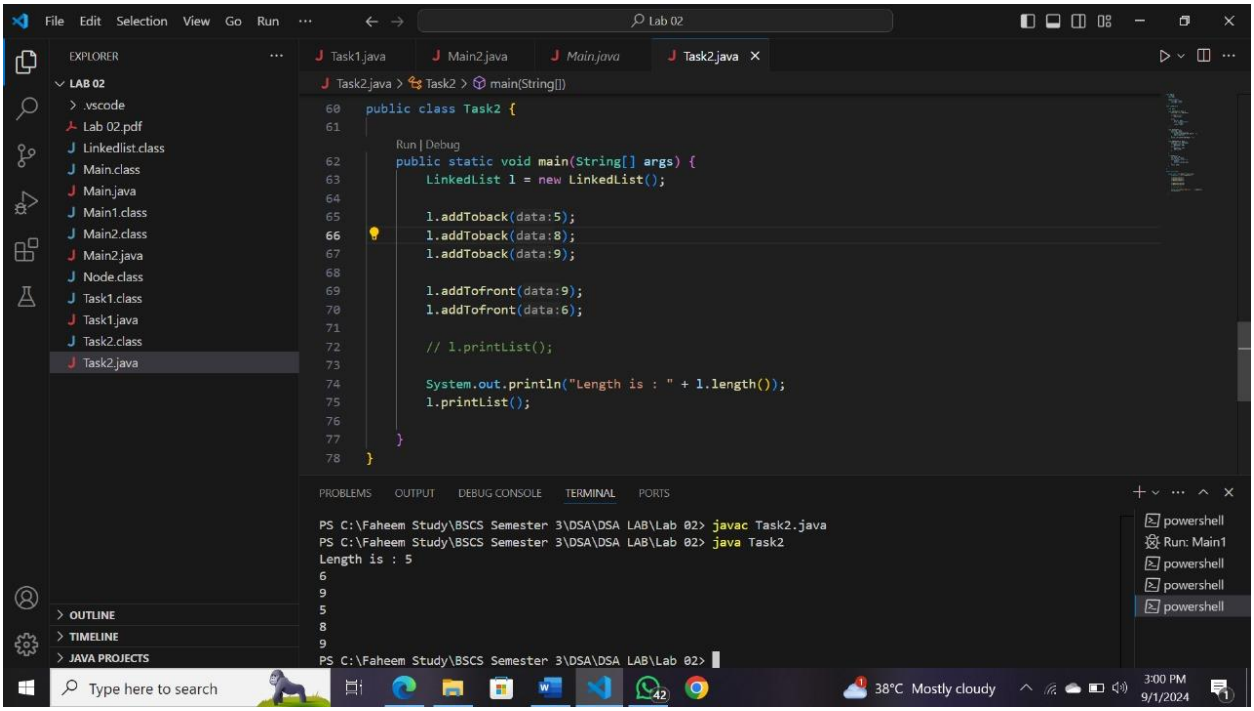
Solution





```
class LinkedList {
    void printList() {
            System.out.println(node.data + " ");
            node = node.next;
        }
        System.out.println(node.data + " ");
    }

    void addTofront(int data) {
        Node node = new Node(data);
        if (Head == null) {
            Head.next = node;
        } else {
            node.next = Head;
            Head = node;
        }

    }

    int length() {
        int count = 0;
        Node current = Head;
        while (current != null) {
            count++;
            current = current.next;
        }
        return count;
    }

}
```

Output:



```
public class Task2 {

    Run | Debug
    public static void main(String[] args) {
        LinkedList l = new LinkedList();

        l.addToback(data:5);
        l.addToback(data:8);
        l.addToback(data:9);

        l.addTofront(data:9);
        l.addTofront(data:6);

        // l.printList();

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

    }
}
```

```
PS C:\Faheem Study\BSCS Semester 3\DSA\DSA LAB\Lab 02> javac Task2.java
PS C:\Faheem Study\BSCS Semester 3\DSA\DSA LAB\Lab 02> java Task2
Length is : 5
6
9
5
8
9
PS C:\Faheem Study\BSCS Semester 3\DSA\DSA LAB\Lab 02>
```