

## Write a program in Java to insert a new element in a sorted circular linked list

```
package Practice;
class Node {
    int data;
    Node next;

    public Node(int data) {
        this.data = data;
        this.next = null;
    }
}

public class CircularLinkedList {
    Node head;

    public void insert(int data) {
        Node newNode = new Node(data);

        if (head == null) {
            head = newNode;
            newNode.next = head;
        } else if (data <= head.data) {
            newNode.next = head;
            head = newNode;
        } else {
            Node current = head;
            while (current.next != head && data > current.next.data) {
                current = current.next;
            }
            newNode.next = current.next;
            current.next = newNode;
        }
    }

    public void display() {
        if (head == null) {
            System.out.println("Circular linked list is empty.");
            return;
        }

        Node current = head;
        do {
            System.out.print(current.data + " ");
            current = current.next;
        } while (current != head);
        System.out.println();
    }

    public static void main(String[] args) {
        CircularLinkedList cll = new CircularLinkedList();

        cll.insert(2);
        cll.insert(4);
        cll.insert(6);
        cll.insert(8);

        System.out.println("Original Circular Linked List:");
        cll.display();

        int newElement = 5;
        cll.insert(newElement);
    }
}
```

```
        System.out.println("Modified Circular Linked List after inserting "
+ newElement + ":");
        cll.display();
    }
}
```

## OUTPUT

```
Original Circular Linked List:
2 4 6 8
Modified Circular Linked List after inserting 5:
2 4 5 6 8
```