

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

```
package javaFsd3;
public class circularLinkedList {
    public static void main(String[] args) {
        circularLinkedList Obj = new circularLinkedList ();
        Obj.sortedInsert(10);
        Obj.sortedInsert(20);
        Obj.sortedInsert(30);
        Obj.sortedInsert(40);
        Obj.sortedInsert(50);
        Obj.sortedInsert(60);

        Obj.print();

        System.out.println("Linked List after insertion : ");
        Obj.sortedInsert(33);
        Obj.print();
    }
    public static class Node{
        int element;
        Node next;

        public Node(int element) {
            this.element = element;
        }
    }
    int cnt;
    static Node list1, list2;
    public Node head = null;
    public Node tail = null;
    public void print() {
        Node current = head;
        if(head == null) {
            System.out.println("Empty List");
        }

        else {
            System.out.println("Circular Linked List is");
        }
    }
}
```

```

        do{
            //Prints each node by incrementing pointer.
            System.out.print(" "+ current.element);
            current = current.next;
        }while(current != head);
        System.out.println("\n");
    }
}

void sortedInsert(int n)
{
    Node nextNode=new Node(n);
    Node thisNode = head;
    if (thisNode == null)
    {
        nextNode.next = nextNode;
        head = nextNode;
    }
    else if (thisNode.element >= nextNode.element)
    {
        for (int i=0; thisNode.next != head; i++)
            thisNode = thisNode.next;
        thisNode.next = nextNode;
        nextNode.next = head;
        head = nextNode;
    }
    else
    {
        while (thisNode.next != head && thisNode.next.element <
nextNode.element)
            thisNode = thisNode.next;
        nextNode.next = thisNode.next;
        thisNode.next = nextNode;
    }
}
}

```

Output

Console ×

<terminated> circularLinkedList [Java Application] C:\Users\JOTHIKA\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.3.v

Circular Linked List is

10 20 30 40 50 60

Linked List after insertion :

Circular Linked List is

10 20 30 33 40 50 60