

Phase-1 Practice Project: Assisted Practice

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

source code:

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

    Node(int d)
    {
        data = d;
        next = null;
    }
}

class Circularlink
{
    Node head;

    Circularlink() { head = null; }

    void sortedInsert(Node new_node)
    {
        Node current = head;
```

```
if (current == null)
```

```
{
```

```
    new_node.next = new_node;
```

```
    head = new_node;
```

```
}
```

```
else if (current.data >= new_node.data)
```

```
{
```

```
    while (current.next != head)
```

```
        current = current.next;
```

```
    current.next = new_node;
```

```
    new_node.next = head;
```

```
    head = new_node;
```

```
}
```

```
else
```

```
{
```

```
    while (current.next != head &&
```

```
        current.next.data < new_node.data)
```

```

        current = current.next;

        new_node.next = current.next;
        current.next = new_node;
    }
}

```

```

void printList()
{
    if (head != null)
    {
        Node temp = head;

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

```

```

public static void main(String[] args)
{
    Circularlink list = new Circularlink();

    int arr[] = new int[] {3, 75, 9, 32, 8, 30};
}

```

```
Node temp = null;
```

```
for (int i = 0; i < 6; i++)  
{  
    temp = new Node(arr[i]);  
    list.sortedInsert(temp);  
}
```

```
list.printList();
```

```
}
```

```
}
```

output:

