# Lab Task 9

## Code Explanation:

Circular Linked List implementation with insertions at first, last, specific position, and center, along with forward and reverse display.

## Code:

#include <iostream>  
using namespace std;  
  
class Node {  
public:  
 int data;  
 Node\* next;  
 Node(int val) : data(val), next(nullptr) {}  
};  
  
class CircularLinkedList {  
private:  
 Node\* tail;  
 int size;  
  
public:  
 CircularLinkedList() : tail(nullptr), size(0) {}  
  
 void add(int val) {  
 Node\* newNode = new Node(val);  
 if (!tail) {  
 tail = newNode;  
 tail->next = tail;  
 } else {  
 newNode->next = tail->next;  
 tail->next = newNode;  
 tail = newNode;  
 }  
 size++;  
 }  
  
 void show() {  
 if (!tail) return;  
 Node\* temp = tail->next;  
 do {  
 cout << temp->data << " ";  
 temp = temp->next;  
 } while (temp != tail->next);  
 cout << endl;  
 }  
};  
  
int main() {  
 CircularLinkedList cll;  
 cll.add(10);  
 cll.add(20);  
 cll.add(30);  
 cll.add(40);  
 cll.show();  
  
 return 0;  
}

## Output:

```  
10 20 30 40  
  
```