```
simal_ahmed@Simal-PC:/mnt/c/Users/lenovo/Desktop$ gcc DLl.c
simal_ahmed@Simal-PC:/mnt/c/Users/lenovo/Desktop$ ./a.out

Main Menu:
1. Create DLL of N Employee Data
2. Display DLL and count the nodes
3. Insertion and Deletion at End
4. Insertion and Deletion at Front
5. Demonstrate DLL as Double Ended Queue
6. Exit
Enter your choice: 1
Enter the number of employees: 2

Enter SSN: A101
Enter Name: Neha
Enter Department: IT
Enter Designation: Developer
Enter Salary: 72000
Enter Phone Number: 8745987457

Enter SSN: A102
Enter Name: Rakesh
Enter Department: Finance
Enter Designation: Analyst
Enter Salary: 45000
Enter Phone Number: 9696969696

Doubly Linked List created with 2 employees.

Main Menu:
1. Create DLL of N Employee Data
2. Display DLL and count the nodes
3. Insertion and Deletion at End
4. Insertion and Deletion at Front
5. Demonstrate DLL as Double Ended Queue
6. Exit
Enter your choice: 2

Employee Data in DLL:
--------------------------------------------------------------------------------
SSN: A101 | Name: Neha | Dept: IT | Designation: Developer | Salary: 72000.00 | PhNo: 8745987457
SSN: A102 | Name: Rakesh | Dept: Finance | Designation: Analyst | Salary: 45000.00 | PhNo: 9696969696
--------------------------------------------------------------------------------
Total number of employees: 2

Main Menu:
1. Create DLL of N Employee Data
2. Display DLL and count the nodes
3. Insertion and Deletion at End
4. Insertion and Deletion at Front
```

```
3. Insertion and Deletion at End
4. Insertion and Deletion at Front
5. Demonstrate DLL as Double Ended Queue
6. Exit
Enter your choice: 3

End Operations:
1. Insert at End
2. Delete from End
Enter your choice: 1

Enter SSN: A103
Enter Name: Manoj
Enter Department: Sales
Enter Designation: Senior Executive
Enter Salary: 48000
Enter Phone Number: 6516516513

Employee data inserted at the end.

Main Menu:
1. Create DLL of N Employee Data
2. Display DLL and count the nodes
3. Insertion and Deletion at End
4. Insertion and Deletion at Front
5. Demonstrate DLL as Double Ended Queue
6. Exit
Enter your choice: 4

Front Operations:
1. Insert at Front
2. Delete from Front
Enter your choice: 1

Enter SSN: A100
Enter Name: Arjun
Enter Department: Operations
Enter Designation: Supervisor
Enter Salary: 52000
Enter Phone Number: 3253653256

Employee data inserted at the front.

Main Menu:
1. Create DLL of N Employee Data
2. Display DLL and count the nodes
3. Insertion and Deletion at End
4. Insertion and Deletion at Front
5. Demonstrate DLL as Double Ended Queue
6. Exit
```

```
Enter your choice: 2

Employee Data in DLL:
-------------------------------------------------------------------------------
SSN: A100 | Name: Arjun | Dept: Operations | Designation: Supervisor | Salary: 52000.00 | PhNo: 3253653256
SSN: A101 | Name: Neha | Dept: IT | Designation: Developer | Salary: 72000.00 | PhNo: 8745987457
SSN: A102 | Name: Rakesh | Dept: Finance | Designation: Analyst | Salary: 45000.00 | PhNo: 9696969696
SSN: A103 | Name: Manoj | Dept: Sales | Designation: Senior Executive | Salary: 48000.00 | PhNo: 6516516513
-------------------------------------------------------------------------------
Total number of employees: 4

Main Menu:
1. Create DLL of N Employee Data
2. Display DLL and count the nodes
3. Insertion and Deletion at End
4. Insertion and Deletion at Front
5. Demonstrate DLL as Double Ended Queue
6. Exit
Enter your choice: 3

End Operations:
1. Insert at End
2. Delete from End
Enter your choice: 2

Employee data deleted from the end.

Main Menu:
1. Create DLL of N Employee Data
2. Display DLL and count the nodes
3. Insertion and Deletion at End
4. Insertion and Deletion at Front
5. Demonstrate DLL as Double Ended Queue
6. Exit
Enter your choice: 4

Front Operations:
1. Insert at Front
2. Delete from Front
Enter your choice: 2

Employee data deleted from the front.

Main Menu:
1. Create DLL of N Employee Data
2. Display DLL and count the nodes
3. Insertion and Deletion at End
4. Insertion and Deletion at Front
5. Demonstrate DLL as Double Ended Queue
6. Exit
```

```
Enter your choice: 2

Employee Data in DLL:
--------------------------------------------------------------------------------
SSN: A101 | Name: Neha | Dept: IT | Designation: Developer | Salary: 72000.00 | PhNo: 8745987457
SSN: A102 | Name: Rakesh | Dept: Finance | Designation: Analyst | Salary: 45000.00 | PhNo: 9696969696
--------------------------------------------------------------------------------
Total number of employees: 2

Main Menu:
1. Create DLL of N Employee Data
2. Display DLL and count the nodes
3. Insertion and Deletion at End
4. Insertion and Deletion at Front
5. Demonstrate DLL as Double Ended Queue
6. Exit
Enter your choice: 5

Double Ended Queue Operations:
1. Insert at Front
2. Insert at End
3. Delete from Front
4. Delete from End
5. Display
6. Go back to Main Menu
Enter your choice: 1

Enter SSN: B101
Enter Name: Priya
Enter Department: IT
Enter Designation: Tester
Enter Salary: 60000
Enter Phone Number: 2542142541

Employee data inserted at the front.

Double Ended Queue Operations:
1. Insert at Front
2. Insert at End
3. Delete from Front
4. Delete from End
5. Display
6. Go back to Main Menu
Enter your choice: 2

Enter SSN: B102
Enter Name: Suresh
Enter Department: Logistics
Enter Designation: Coordinator
Enter Salary: 51000
```

```
Enter Salary: 51000
Enter Phone Number: 2032032031

Employee data inserted at the end.

Double Ended Queue Operations:
1. Insert at Front
2. Insert at End
3. Delete from Front
4. Delete from End
5. Display
6. Go back to Main Menu
Enter your choice: 5

Employee Data in DLL:
---------------------------------------------------------------------------
SSN: B101 | Name: Priya | Dept: IT | Designation: Tester | Salary: 60000.00 | PhNo: 2542142541
SSN: A101 | Name: Neha | Dept: IT | Designation: Developer | Salary: 72000.00 | PhNo: 8745987457
SSN: A102 | Name: Rakesh | Dept: Finance | Designation: Analyst | Salary: 45000.00 | PhNo: 9696969696
SSN: B102 | Name: Suresh | Dept: Logistics | Designation: Coordinator | Salary: 51000.00 | PhNo: 2032032031
---------------------------------------------------------------------------
Total number of employees: 4

Double Ended Queue Operations:
1. Insert at Front
2. Insert at End
3. Delete from Front
4. Delete from End
5. Display
6. Go back to Main Menu
Enter your choice: 3

Employee data deleted from the front.

Double Ended Queue Operations:
1. Insert at Front
2. Insert at End
3. Delete from Front
4. Delete from End
5. Display
6. Go back to Main Menu
Enter your choice: 4

Employee data deleted from the end.

Double Ended Queue Operations:
1. Insert at Front
2. Insert at End
3. Delete from Front
4. Delete from End
```

```
6. Go back to Main Menu
Enter your choice: 3

Employee data deleted from the front.

Double Ended Queue Operations:
1. Insert at Front
2. Insert at End
3. Delete from Front
4. Delete from End
5. Display
6. Go back to Main Menu
Enter your choice: 4

Employee data deleted from the end.

Double Ended Queue Operations:
1. Insert at Front
2. Insert at End
3. Delete from Front
4. Delete from End
5. Display
6. Go back to Main Menu
Enter your choice: 5

Employee Data in DLL:
-------------------------------------------------------------------------------
SSN: A101 | Name: Neha | Dept: IT | Designation: Developer | Salary: 72000.00 | PhNo: 8745987457
SSN: A102 | Name: Rakesh | Dept: Finance | Designation: Analyst | Salary: 45000.00 | PhNo: 9696969696
-------------------------------------------------------------------------------
Total number of employees: 2

Double Ended Queue Operations:
1. Insert at Front
2. Insert at End
3. Delete from Front
4. Delete from End
5. Display
6. Go back to Main Menu
Enter your choice: 6

Main Menu:
1. Create DLL of N Employee Data
2. Display DLL and count the nodes
3. Insertion and Deletion at End
4. Insertion and Deletion at Front
5. Demonstrate DLL as Double Ended Queue
6. Exit
Enter your choice: 6
Exiting the program.
```