

```
1: Insert front
2: Insert rear
3: Delete front
4: Delete rear
5: Insert to the left of the key element
6: Insert to the right of the key element
7: Search
8: Delete duplicate terms
9: Display
10: Exit
```

Enter the choice

1

enter the item at front end

12

```
1: Insert front
2: Insert rear
3: Delete front
4: Delete rear
5: Insert to the left of the key element
6: Insert to the right of the key element
7: Search
8: Delete duplicate terms
9: Display
10: Exit
```

Enter the choice

2

enter the item at rear end

13

```
1: Insert front
2: Insert rear
3: Delete front
4: Delete rear
5: Insert to the left of the key element
6: Insert to the right of the key element
7: Search
8: Delete duplicate terms
9: Display
10: Exit
```

Enter the choice

1

enter the item at front end

14

```
1: Insert front
2: Insert rear
3: Delete front
4: Delete rear
5: Insert to the left of the key element
6: Insert to the right of the key element
7: Search
8: Delete duplicate terms
9: Display
10: Exit
```

Enter the choice

2

enter the item at rear end

15

```
1: Insert front
2: Insert rear
3: Delete front
4: Delete rear
5: Insert to the left of the key element
6: Insert to the right of the key element
7: Search
8: Delete duplicate terms
9: Display
10: Exit
```

Enter the choice

1

enter the item at front end

15

```
1: Insert front
2: Insert rear
3: Delete front
4: Delete rear
5: Insert to the left of the key element
6: Insert to the right of the key element
7: Search
8: Delete duplicate terms
9: Display
10: Exit
```

Enter the choice

9

contents of doubly linked list:

15 14 12 13 15

```
1: Insert front
2: Insert rear
3: Delete front
4: Delete rear
5: Insert to the left of the key element
6: Insert to the right of the key element
7: Search
8: Delete duplicate terms
9: Display
10: Exit
```

Enter the choice

3

the node deleted is 15

```
1: Insert front
2: Insert rear
3: Delete front
4: Delete rear
5: Insert to the left of the key element
6: Insert to the right of the key element
7: Search
8: Delete duplicate terms
9: Display
10: Exit
```

Enter the choice

1

enter the item at front end

15

```
1: Insert front
2: Insert rear
```

1: Insert front
2: Insert rear
3: Delete front
4: Delete rear
5: Insert to the left of the key element
6: Insert to the right of the key element
7: Search
8: Delete duplicate terms
9: Display
10: Exit

Enter the choice

5

enter the key element

13

enter towards left of 13=11

1: Insert front
2: Insert rear
3: Delete front
4: Delete rear
5: Insert to the left of the key element
6: Insert to the right of the key element
7: Search
8: Delete duplicate terms
9: Display
10: Exit

Enter the choice

9

contents of doubly linked list:

15 14 12 11 13 15

1: Insert front
2: Insert rear
3: Delete front
4: Delete rear
5: Insert to the left of the key element
6: Insert to the right of the key element
7: Search
8: Delete duplicate terms
9: Display
10: Exit

Enter the choice

7

enter the search element

14

search successful

1: Insert front
2: Insert rear
3: Delete front
4: Delete rear
5: Insert to the left of the key element
6: Insert to the right of the key element
7: Search
8: Delete duplicate terms
9: Display
10: Exit

Enter the choice

8

enter element to be deleted

```
1: Insert front
2: Insert rear
3: Delete front
4: Delete rear
5: Insert to the left of the key element
6: Insert to the right of the key element
7: Search
8: Delete duplicate terms
9: Display
10: Exit
```

Enter the choice

9

contents of doubly linked list:

15 14 12 11 13 15

```
1: Insert front
2: Insert rear
3: Delete front
4: Delete rear
5: Insert to the left of the key element
6: Insert to the right of the key element
7: Search
8: Delete duplicate terms
9: Display
10: Exit
```

Enter the choice

7

enter the search element

14

search successful

```
1: Insert front
2: Insert rear
3: Delete front
4: Delete rear
5: Insert to the left of the key element
6: Insert to the right of the key element
7: Search
8: Delete duplicate terms
9: Display
10: Exit
```

Enter the choice

8

enter element to be deleted

15

found at 2 positions and are deleted contents of doubly linked list:

14 12 11 13

```
1: Insert front
2: Insert rear
3: Delete front
4: Delete rear
5: Insert to the left of the key element
6: Insert to the right of the key element
7: Search
8: Delete duplicate terms
9: Display
10: Exit
```

Enter the choice