```
Enter choice: 1)insertend 2)insertbefore 3)deleteend 4)deleteval 5)display 6)exit : 1
Enter value: 10
Enter choice: 1)insertend 2)insertbefore 3)deleteend 4)deleteval 5)display 6)exit : 1
Enter value: 20
Enter choice: 1)insertend 2)insertbefore 3)deleteend 4)deleteval 5)display 6)exit : 1
Enter value: 30
Enter choice: 1)insertend 2)insertbefore 3)deleteend 4)deleteval 5)display 6)exit : 5
10      20      30
Enter choice: 1)insertend 2)insertbefore 3)deleteend 4)deleteval 5)display 6)exit : 2
Enter value: 15
Enter the element before which value is to be inserted: 20
Enter choice: 1)insertend 2)insertbefore 3)deleteend 4)deleteval 5)display 6)exit : 5
10      15      20      30
Enter choice: 1)insertend 2)insertbefore 3)deleteend 4)deleteval 5)display 6)exit : 3
Enter choice: 1)insertend 2)insertbefore 3)deleteend 4)deleteval 5)display 6)exit : 5
10      15      20
Enter choice: 1)insertend 2)insertbefore 3)deleteend 4)deleteval 5)display 6)exit : 4
Enter the value to be deleted: 10
Enter choice: 1)insertend 2)insertbefore 3)deleteend 4)deleteval 5)display 6)exit : 5
15      20
Enter choice: 1)insertend 2)insertbefore 3)deleteend 4)deleteval 5)display 6)exit :
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Enter choice: 1)insertend 2)insertbefore 3)deleteend 4)deleteval 5)display 6)exit : 1
Enter value: 10
Enter choice: 1)insertend 2)insertbefore 3)deleteend 4)deleteval 5)display 6)exit : 3
Enter choice: 1)insertend 2)insertbefore 3)deleteend 4)deleteval 5)display 6)exit : 5
List is empty
Enter choice: 1)insertend 2)insertbefore 3)deleteend 4)deleteval 5)display 6)exit : 1
Enter value: 10
Enter choice: 1)insertend 2)insertbefore 3)deleteend 4)deleteval 5)display 6)exit : 1
Enter value: 20
Enter choice: 1)insertend 2)insertbefore 3)deleteend 4)deleteval 5)display 6)exit : 1
Enter value: 30
Enter choice: 1)insertend 2)insertbefore 3)deleteend 4)deleteval 5)display 6)exit : 1
Enter value: 45
Enter choice: 1)insertend 2)insertbefore 3)deleteend 4)deleteval 5)display 6)exit : 2
Enter value: 42
Enter the element before which value is to be inserted: 45
Enter choice: 1)insertend 2)insertbefore 3)deleteend 4)deleteval 5)display 6)exit : 5
10      20      30      42      45
Enter choice: 1)insertend 2)insertbefore 3)deleteend 4)deleteval 5)display 6)exit :
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