

## Source Code:

```
#include <iostream>
#include <list>

using namespace std;

// function to add element in front of list
void insertFront(list<int> &list1, int x){
    list1.push_front(x);
}

// function to add element at the back of the list
void insertBack(list<int> &list1, int x){
    list1.push_back(x);
}

// function to delete element in front of list
void deleteFront(list<int> &list1){
    list1.pop_front();
}

// function to delete element at the back of the list
void deleteBack(list<int> &list1){
    list1.pop_back();
}

// function that displays the list
void displayList(list<int> &list1){
    for (int n : list1){
        cout << n << " ";
    }
}

int main(){
    int inputFront = 19;
    int inputBack = 20;

    list<int> list1 = {0, 1, 2, 3};
```

```

    cout << "Initial List: ";
    displayList(list1);
    cout << endl;

    cout << "List after adding front and back elements: ";
    insertFront(list1, inputFront);
    insertBack(list1, inputBack);
    displayList(list1);
    cout << endl;

    cout << "List after removing front and back elements: ";
    deleteFront(list1);
    deleteBack(list1);
    displayList(list1);
    cout << endl;

    return 0;
}

```

#### Sample Run:

```

PS C:\Users\Kyla> cd "c:\Users\Kyla\Documents\C++\C++ VSCod
Initial List: 0 1 2 3
List after adding front and back elements: 19 0 1 2 3 20
List after removing front and back elements: 0 1 2 3

```