```cpp
#include <iostream>
using namespace std;

struct node {
    int data;
    node *next;
};

int main() {
    int i, n, item, pos;
    node *nptr, *tptr, *list;
    list = NULL;

    cout << "Enter number of nodes: ";
    cin >> n;

    cout << "Enter data for node with space: ";
    for (i = 1; i <= n; ++i) {
        cin >> item;
        nptr = new node;
        nptr->data = item;
        nptr->next = NULL;
        if (list == NULL) {
            list = nptr;
            tptr = nptr;
        } else {
            tptr->next = nptr;
            tptr = nptr;
        }
    }

    cout << "Enter the position to insert the new node (0 for head, -1 for end): ";
    cin >> pos;
    cout << "Enter the data for the new node: ";
    cin >> item;

    nptr = new node;
    nptr->data = item;
    nptr->next = NULL;

    if (pos == 0) {
        // Insert at head
        nptr->next = list;
        list = nptr;
    } else if (pos == -1) {
        // Insert at end
        tptr = list;
        while (tptr->next != NULL) {
            tptr = tptr->next;
        }
        tptr->next = nptr;
    } else {
        // Insert at specific position
        tptr = list;
        int count = 0;
        while (tptr->next->data < nptr->data) {
            tptr = tptr->next;
            count++;
        }
        if (tptr == NULL) {
            cout << "Position out of bounds" << endl;
        } else {
            nptr->next = tptr->next;
            tptr->next = nptr;
        }
    }

    // Print the final list
    tptr = list;
    cout << "Final linked list: ";
    while (tptr != NULL) {
        cout << tptr->data << " ";
        tptr = tptr->next;
    }
    cout << endl;

    return 0;
}
```