Roll Number – A11

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#include <iostream>
#include <string>
using namespace std;
struct playlist {
   string song;
   string artist;
   int duration;
   playlist* next;
   playlist* prev;
} *start, *tail, *temp, *ptr, *song1, *song2;
insertsong (string songname, string artistname, int songduration) {
    ptr = new playlist();
   ptr->song = songname;
   ptr->artist = artistname;
   ptr->duration = songduration;
   ptr->next = nullptr;
   ptr->prev = nullptr;
    if (start == nullptr) {
        start = new playlist();
        start = ptr;
       tail = ptr;
    else {
        temp = start;
        while(temp->next != nullptr) {
            temp = temp->next;
        ptr->prev = temp;
        temp->next = ptr;
    tail = ptr;
traversesong () {
    temp = start;
    int i = 0;
   while (temp != nullptr) {
        i ++;
        cout << i << ".";
        cout << "Song name-> " << temp->song << ", ";</pre>
        cout << "Artist name-> " << temp->artist<< ", ";</pre>
        cout << "Song duration-> " << temp->duration <<"."<< endl;</pre>
        temp = temp->next;
```

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deletesong(string songname) {
    if (start->song == songname) {
        start->next->prev = nullptr;
        temp = start;
        start = start->next;
        free(temp);
    else {
        temp = start;
    while (temp != nullptr) {
        temp = temp->next;
        if (temp->song == songname) {
            temp->next->prev = temp->prev;
            temp->prev->next = temp->next;
            free(temp);
    if (temp->song == songname) {
        temp->prev->next = nullptr;
swapsong(int pos1, int pos2) {
    int i = 1;
    temp = start;
    string swapsong, swapartist;
    int swapduartion;
    song1 = new playlist();
    song2 = new playlist();
    while (temp != nullptr) {
        if (i == pos1) {
            song1 = temp;
        else if (i == pos2) {
            song2 = temp;
```

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swapsong = song2->song;
    swapartist = song2->artist;
    swapduartion = song2->duration;
    song2->song = song1->song;
    song2->artist = song1->artist;
    song2->duration = song1->duration;
    song1->song = swapsong;
    song1->artist = swapartist;
    song1->duration = swapduartion;
    int i = 1;
int main() {
    int n;
    string songname;
    string artistname;
    int songduration;
    cout << "Enter the number of songs u want to add: ";</pre>
    cin >> n;
    for (int i = 0; i < n; i ++) {
        cout << "Enter song "<< (i+1) << " : ";
        cin >> songname;
        cout << "Enter the artist name : ";</pre>
        cin >> artistname;
        cout << "Enter the duration of the song : ";</pre>
        cin >> songduration;
        insertsong(songname, artistname, songduration);
    traversesong();
    // cout << "Enter the song u want to delete from the playlist: ";</pre>
    // cin >> songname;
    // deletesong(songname);
    // traversesong();
    cout << "Enter 2 positions u want to swap: ";</pre>
    int pos1, pos2;
    cin >> pos1;
    cin >> pos2;
    swapsong(pos1, pos2);
    traversesong();
```