

6-08-21

①

```
#include <iostream>
```

```
class DB;
```

```
class DM {
```

```
private:
```

```
float metu, centimetu;
```

```
public:
```

```
DM() {
```

```
metu = 0.0;
```

```
centimetu = 0.0;
```

```
}
```

```
void getData() {
```

```
cout << "Enter distance in m \n";
```

```
cin >> metu;
```

```
cout << "Enter in cm \n";
```

```
cin >> centimetu;
```

```
}
```

```
void displayData() {
```

```
cout << "The Distance is " << metu << "m,"
```

```
<< "centimetu << "cm \n";
```

```
}
```

```
void Add (DM2, DB2; int) {
```

```
}
```

```
class DB {
```

```
private:
```

```
float feet, inches;
```

```
public:
```

```
DB() {
```

```
feet = 0.0;
```

```
inches = 0.0;
```

```
}
```

```
void getData() {
```

```
cout << "Enter distance inches \n";
```

```
cin << feet;
```

```
cout << "Enter distance inches \n";
```

```
cin << inches;
```

```
}
```



```
void displayData() {
```

```
    cout << "The Distance is " << feet << " feet and "  
    << inches << " inches \n";
```

```
}
```

```
friend void DM::Add(DM& x, DB& y, int  
flag);
```

```
void DM::Add(DM& x, DB& y, int flag) {
```

```
    if (flag == 0) {
```

```
        std::cout << "Sum = " << (3.2 * x.meter)
```

```
        + y.feet << " feet and " << (.39 * x.
```

```
        centimeter) + y.inches << " inches \n";
```

```
    }
```

```
    else {
```

```
        std::cout << "Sum = " << x.meter + y.feet/3.2
```

```
        << " meter and " << x.centimeter + y.inches/.39
```

```
        << " centimeter \n";
```

```
    }
```

```
}
```

```
int main() {
```

```
    DM x;
```

```
    DB y;
```

```
    x.getData();
```

```
    x.displayData();
```

```
    y.getData();
```

```
    y.displayData();
```

```
    int flag = 0;
```

```
    cout << "Enter 0 for inches and 1 for meter \n";
```

```
    cin << flag;
```

```
    x.Add(x, y, flag);
```

```
    return 0;
```

```
}
```


Q2 6/08/21

```
#include <iostream>
#include <bits/stdc++.h>
using namespace std;
class Node {
public:
    int data;
    Node* next;
};

void delete_node (Node* head, Node* n) {
    if (head == n) {
        if (head->next == NULL) {
            cout << "There is only one Node";
            return;
        }
        head->data = head->next->data;
        n = head->next;
        head->next = head->next->next;
        free(n);
        return;
    }
    Node* prev = head;
    while (prev->next != NULL && prev->next != n) {
        prev = prev->next;
    }
    if (prev->next == NULL) {
        cout << "Node not present";
        return;
    }
    prev->next = prev->next->next;
    free(n);
    return;
}
```



```

void push(Node **head_ref, int new data) {
    Node *new_node = new Node();
    new_node->data = new data;
    new_node->next = *head_ref;
    *head_ref = new_node;
}

```

```

void print_list(Node * head) {
    while (head != NULL) {
        cout << head->data << " ";
        head = head->next;
    }
}

```

```

int main () {
    Node * head = NULL;
    char c;
    cout << " Press Y to enter data ";
    cin >> c;
    while (c == 'y' || c == 'Y') {
        int data;
        cout << " enter data ";
        cin >> data;
        push (&head, data);
        cout << " Press Y to enter more ";
        cin >> c;
    }
}

```

```

Print list(head);
cout << " enter node to delete ";
cin >> data;
Node * temp = head;
while (temp->data != data) {
    temp = temp->next;
}
if (temp next != NULL) {
    delete node (head, temp);
}
else {
}

```



```
C
    cout << "Node not there";
}
printlist(head);
return 0;
}
```