

1301213126

The image displays two screenshots of the Code::Blocks IDE, showing the development of a C++ program. The top screenshot shows the header file 'Rumah.h' with the following code:

```
1 #ifndef RUMAH_H_INCLUDED
2 #define RUMAH_H_INCLUDED
3
4 #include <iostream>
5
6 using namespace std;
7
8 #define info(P) (P->info)
9 #define next(P) (P->next)
10 #define prev(P) (P->prev)
11 #define first(L) ((L).first)
12 #define last(L) ((L).last)
13 #define nil NULL
14
15 typedef struct DataRumah infotype;
16 typedef struct element *adr;
17
18
19 struct DataRumah {
20     int ID_faktur;
21     string tipe_Rumah;
22     int Rumah_Terjual;
23 };
24
25 struct element{
26     infotype info;
27     adr next;
28     adr prev;
29 };
30
31 struct List{
32     adr first;
33     adr last;
34 }
```

The bottom screenshot shows the same file with additional function prototypes and implementations:

```
14
15 typedef struct DataRumah infotype;
16 typedef struct element *adr;
17
18
19 struct DataRumah {
20     int ID_faktur;
21     string tipe_Rumah;
22     int Rumah_Terjual;
23 };
24
25 struct element{
26     infotype info;
27     adr next;
28     adr prev;
29 };
30
31 struct List{
32     adr first;
33     adr last;
34 };
35
36 void Create_list_1301213126(List &L);
37 adr newElement_1301213126(infotype x);
38 infotype newInfoType_1301213126(int &ID, string tipe, int terjual);
39 void insert_first_1301213126(List &L, adr P);
40 void ShowStatistik_1301213126(List L);
41 void ShowAllData_1301213126(List L);
42 int selectMenu_1301213126();
43
44 #endif // RUMAH_H_INCLUDED
45
```

rumah.cpp [TP_MOD6_1301213126] - Code::Blocks 20.03

File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoxyBlocks Settings Help

<global> ShowAllData_1301213126(List L):void

Management

TP_MOD6_1301213126

Sources

main.cpp
rumah.cpp

Headers

```
1 #include "Rumah.h"
2
3 void Create_list_1301213126(List &L){
4     first(L) = nil;
5     last(L) = nil;
6 }
7
8 adr newElement_1301213126(infotype x){
9     adr P = new element;
10    info(P) = x;
11    next(P) = nil;
12    prev(P) = nil;
13    return P;
14 }
15
16 infotype newInfoType_1301213126(int &ID, string tipe, int terjual){
17     DataRumah rumah;
18     rumah.ID_faktur = ID;
19     rumah.tipe_Rumah = tipe;
20     rumah.Rumah_Terjual = terjual;
21     ID++;
22     return rumah;
23 }
24
25 void insert_first_1301213126(List &L, adr P){
26     if(first(L) == nil && last(L) == nil){
27         first(L) = P;
28         last(L) = P;
29     }
30 }
```

D:\DOC\TELKOM\KULOAH\STRUKDAT\tugas\TP_MOD6_1301213126\rumah.cpp C/C++ Windows (CR+LF) WINDOWS-1252 Line 54, Col 5, Pos 1360 Insert Read/Write default

rumah.cpp [TP_MOD6_1301213126] - Code::Blocks 20.03

File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoxyBlocks Settings Help

<global> ShowAllData_1301213126(List L):void

Management

TP_MOD6_1301213126

Sources

main.cpp
rumah.cpp

Headers

```
25 void insert_first_1301213126(List &L, adr P){
26     if(first(L) == nil && last(L) == nil){
27         first(L) = P;
28         last(L) = P;
29     }
30     else {
31         next(P) = first(L);
32         first(L) = P;
33     }
34 }
35
36 void ShowaStatistik_1301213126(List L){
37     int n, total_terjual = 0;
38     if (last(L) != nil){
39         adr P = last(L);
40         while (P != nil){
41             cout<<"ID : "<<P->info.ID_faktur<<"\nTipe_Rumah : "<<P->info.tipe_Rumah<<"\nRumah Terjual : "<<P->info.Rumah_Terjual<<"\n";
42             total_terjual= total_terjual + P->info.Rumah_Terjual;
43             n++;
44             P = prev(P);
45         }
46         cout<<endl;
47         cout<<"Jumlah Data yang telah di inputkan : "<<endl;
48         cout<<"Jumlah Rumah Terjual : "<<total_terjual<<endl;
49         cout<<endl;
50     }
51     else{
52         cout<<"List Kosong"<<endl;
53     }
54 }
55 void ShowAllData_1301213126(List L){
```

D:\DOC\TELKOM\KULOAH\STRUKDAT\tugas\TP_MOD6_1301213126\rumah.cpp C/C++ Windows (CR+LF) WINDOWS-1252 Line 54, Col 5, Pos 1360 Insert Read/Write default

rumah.cpp [TP_MOD6_1301213126] - Code::Blocks 20.03

File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoxyBlocks Settings Help

Debug

<global> ShowAllData_1301213126(List L): void

Management

Projects Files

rkpspace

TP_MOD6_1301213126

Sources

main.cpp

rumah.cpp

Headers

```
43     P = prev(P);
44 }
45 cout<<endl;
46 cout<<"Jumlah Data yang telah di inputkan : "<<endl;
47 cout<<"Jumlah Rumah Terjual : "<<total_terjual<<endl;
48 cout<<endl;
49 }else{
50     cout<<"List Kosong"<<endl;
51 }
52 }
53 void ShowAllData_1301213126(List L){
54     int n, total_terjual = 0;
55     if (last(L) != nil){
56         adr P = last(L);
57         while (P != nil){
58             cout<<"ID : "<<P->info.ID_faktur<<"\nTipe_Rumah : "<<P->info.tipe_Rumah<<"\nRumah Terjual : "<<P->info.Rumah_Terjual<<"\n";
59             total_terjual= total_terjual + P->info.Rumah_Terjual;
60             n++;
61             P = prev(P);
62         }
63         cout<<endl;
64     }else{
65         cout<<"List Kosong"<<endl;
66     }
67 }
68
69
70
```

D:\DOC\TELKOM\KULOAH\STRUKDAT\tugas\TP_MOD6_1301213126\rumah.cpp C/C++ Windows (CR+LF) WINDOWS-1252 Line 54, Col 5, Pos 1360 Insert Read/Write default

main.cpp [TP_MOD6_1301213126] - Code::Blocks 20.03

File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoxyBlocks Settings Help

Debug

<global>

Management

Projects Files

rkpspace

TP_MOD6_1301213126

Sources

main.cpp

rumah.cpp

Headers

```
1 #include <iostream>
2 #include "Rumah.h"
3 #include <stdio.h>
4 #include <conio.h>
5 #include <stdlib.h>
6
7 using namespace std;
8
9 int main()
10 {
11     List L;adr P;string newData;int ID = 1;string tipe;int terjual;int pilihan;nData;
12     Create_list_1301213126(L);
13
14     do{
15         system("cls");
16         cout<<endl;
17         cout<<"===== MENU =====<<endl;
18         cout<<" 1. Menambah N data baru "<<endl;
19         cout<<" 2. Menampilkan Semua Data "<<endl;
20         cout<<" 3. Menampilkan Jumlah Data Penjualan "<<endl;
21         cout<<" 0. Exit "<<endl;
22         cout<<"Masukkan Pilihan : ";cin>>pilihan;
23         switch(pilihan)
24         {
25             case 1: system("cls");{
26                 cout<<"Jumlah data yang akan ditambahkan = ";cin>>nData;
27                 int i;
28                 while(i < nData){
29                     cout<<"Input data ke- "<<ID<<endl;

```

D:\DOC\TELKOM\KULOAH\STRUKDAT\tugas\TP_MOD6_1301213126\main.cpp C/C++ Windows (CR+LF) WINDOWS-1252 Line 63, Col 1, Pos 1946 Insert Read/Write default

main.cpp [TP_MOD6_1301213126] - Code::Blocks 20.03

File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoxyBlocks Settings Help

Debug

<global>

Management

Projects Files

rkpspace

TP_MOD6_1301213126

Sources

main.cpp

rumah.cpp

Headers

25 case 1: system("cls");{
26 cout<<"Jumlah data yang akan ditambahkan = ";cin>>nData;
27 int i;
28 while(i < nData){
29 cout<<"Input data ke-"<<ID<<endl;
30 cout<<"Tipe Rumah : ";cin>>tipe;
31 cout<<"Rumah Terjual : ";cin>>terjual;
32 P = newElement_1301213126(newInfoType_1301213126(ID, tipe, terjual));
33 insert_first_1301213126(L,P);
34
35 cout<<endl;
36 i++;
37 }cout<<nData<<" Data telah ditambahkan"<<endl;
38 break;
39 }
40 case 2 : system("cls");{
41 cout<<"Menampilkan Data berdasarkan ID"<<endl;
42 ShowAllData_1301213126(L);
43 break;
44 }
45 case 3 : system("cls");{
46 cout<<"statistik Data \n"<<endl;
47 ShowaStatistik_1301213126(L);
48 break;
49 }
50 case 0 : system("cls");{
51 return 0;
52 break;
53 }

D:\DOC\TELKOM\KULOAH\STRUKDAT\tugas\TP_MOD6_1301213126\main.cpp C/C++ Windows (CR+LF) WINDOWS-1252 Line 63, Col 1, Pos 1946 Insert Read/Write default

main.cpp [TP_MOD6_1301213126] - Code::Blocks 20.03

File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoxyBlocks Settings Help

Debug

<global>

Management

Projects Files

rkpspace

TP_MOD6_1301213126

Sources

main.cpp

rumah.cpp

Headers

36 i++;
37 }cout<<nData<<" Data telah ditambahkan"<<endl;
38 break;
39 }
40 case 2 : system("cls");{
41 cout<<"Menampilkan Data berdasarkan ID"<<endl;
42 ShowAllData_1301213126(L);
43 break;
44 }
45 case 3 : system("cls");{
46 cout<<"statistik Data \n"<<endl;
47 ShowaStatistik_1301213126(L);
48 break;
49 }
50 case 0 : system("cls");{
51 return 0;
52 break;
53 }
54 default : system("cls");
55 {
56 cout<<"\n maaf, pilihan tidak tersedia";
57 }
58 }
59 getch();
60 }
61 while (pilihan != 4);
62 }
63 }

D:\DOC\TELKOM\KULOAH\STRUKDAT\tugas\TP_MOD6_1301213126\main.cpp C/C++ Windows (CR+LF) WINDOWS-1252 Line 63, Col 1, Pos 1946 Insert Read/Write default

```
D:\DOC\TELKOM\KULOAHS\STRUKDAT\tugas\TP_MOD6_1301213126\bin\Debug\TP_MOD6_1301213126.exe

===== MENU =====
1. Menambah N data batu
2. Menampilkan Semua Data
3. Menampilkan Jumlah Data Penjualan
0. Exit
Masukkan Pilihan : _
```

```
D:\DOC\TELKOM\KULOAHS\STRUKDAT\tugas\TP_MOD6_1301213126\bin\Debug\TP_MOD6_1301213126.exe

Jumlah data yang akan ditambahkan = 5
Input data ke-1
Tipe Rumah : F
Rumah Terjual : 34

Input data ke-2
Tipe Rumah : G
Rumah Terjual : 23

Input data ke-3
Tipe Rumah : H
Rumah Terjual : 22

Input data ke-4
Tipe Rumah : J
Rumah Terjual : 1

Input data ke-5
Tipe Rumah : K
Rumah Terjual : 8
```

