

```
*C:\Users\linta\OneDrive\Doc x + v
Artis : BTS
Judul : ANPANMAN
Genre : POP
Playtime : 3

Artis : ASHISLAND
Judul : EMPTYHEAD
Genre : HIPHOP
Playtime : 4

Artis : SKINNYBROWN
Judul : IFIDIE
Genre : POP
Playtime : 5

Artis : ONEWEE
Judul : REGULUS
Genre : POP
Playtime : 3

Artis : HOPPIPOLLA
Judul : ENOUGH
Genre : BALLAD
Playtime : 4

Artis : DPRLIVE
Judul : JASMINE
Genre : POP
Playtime : 5

Artis : IU
Judul : BBIBBIBI
Genre : POP
Playtime : 4

Menampilkan List
BTS
ANPANMAN
POP
3

BTS
ANPANMAN
POP
3

ASHISLAND
EMPTYHEAD
HIPHOP
4

SKINNYBROWN
IFIDIE
POP
5

ONEWEE
REGULUS
POP
3

HOPPIPOLLA
ENOUGH
BALLAD
4

DPRLIVE
JASMINE
POP
5

Menampilkan List yang telah dihapus
ASHISLAND
EMPTYHEAD
HIPHOP
4
```

```
*C:\Users\linta\OneDrive\Doc x + v
Menampilkan List yang telah dihapus
ASHISLAND
EMPTYHEAD
HIPHOP
4

ASHISLAND
EMPTYHEAD
HIPHOP
4

SKINNYBROWN
IFIDIE
POP
5

ONEWE
REGULUS
POP
3

HOPPIPOLLA
ENOUGH
BALLAD
4

DPRLIVE
JASMINE
POP
5

Process returned 0 (0x0)   execution time : 134.665 s
Press any key to continue.
```

```
main.cpp x MOD8.cpp x MOD8.h x
1  #include "MOD8.h"
2
3  int main()
4  {
5      ListLagu D;
6      int N = 7;
7      infotype Lagu;
8      adr P;
9
10     CreateList_1301213072(D);
11
12     for (int i = 1; i <= N; i++){
13         cout << "Artis : ";
14         cin >> Lagu.Artis;
15         cout << "Judul : ";
16         cin >> Lagu.Judul;
17         cout << "Genre : ";
18         cin >> Lagu.Genre;
19         cout << "Playtime : ";
20         cin >> Lagu.Playtime;
21         cout << endl << endl;
22
23         newElement_1301213072(Lagu, P);
24         insertLast_1301213072(D, P);
25     }
26     cout << "===== Menampilkan List =====" << endl;
27     showSemuaLagu_1301213072(D);
28
29     deleteFirst_1301213072(D, P);
30
31     cout << "===== Menampilkan List yang telah dihapus =====" << endl;
32     showSemuaLagu_1301213072(D);
33
34     return 0;
35 }
36
```

```

main.cpp X MOD8.cpp X MOD8.h X
1  #ifndef MOD8_H_INCLUDED
2  #define MOD8_H_INCLUDED
3  #include <iostream>
4
5  using namespace std;
6
7  #define info(P) (P)->info
8  #define next(P) (P)->next
9  #define prev(P) (P)->prev
10 #define first(D) ((D).first)
11 #define last(D) ((D).last)
12
13 typedef struct element *adr;
14
15 struct infotype{
16     string Artis, Judul, Genre;
17     int Playtime;
18 };
19
20 struct element{
21     infotype info;
22     adr next;
23 };
24
25 struct ListLagu{
26     adr first;
27 };
28
29 void CreateList_1301213072(ListLagu &D);
30 void newElement_1301213072(infotype laguBaru, adr &PLagu);
31 void insertLast_1301213072(ListLagu &D, adr PLagu);
32 void deleteFirst_1301213072(ListLagu &D, adr PLagu);
33 void showSemuaLagu_1301213072(ListLagu D);
34
35 #endif // MOD8_H_INCLUDED
36

```

```

main.cpp X MOD8.cpp X MOD8.h X
1  #include "MOD8.h"
2
3  void CreateList_1301213072(ListLagu &D){
4      first(D) = NULL;
5  }
6
7  void newElement_1301213072(infotype laguBaru, adr &PLagu){
8      PLagu = new element;
9      info(PLagu) = laguBaru;
10     next(PLagu) = NULL;
11 }
12
13 void insertLast_1301213072(ListLagu &D, adr PLagu){
14     adr Q = first(D);
15
16     if (first(D) == NULL){
17         first(D) = PLagu;
18         next(PLagu) = first(D);
19     }else{
20         //Q = next(Q);
21         while (next(Q) != first(D)){
22             Q = next(Q);
23         }
24         next(Q) = PLagu;
25         next(PLagu) = first(D);
26     }
27 }
28
29 void deleteFirst_1301213072(ListLagu &D, adr PLagu){
30     if (first(D) != NULL){
31         PLagu = first(D);
32         first(D) = next(PLagu);
33         next(PLagu) = NULL;
34
35         adr P = first(D);
36         while (next(P) != PLagu){
37             P = next(P);
38         }
39     }
40 }

```

```

main.cpp x MOD8.cpp x MOD8.h x
23     }
24     next(Q) = PLagu;
25     next(PLagu) = first(D);
26 }
27 }
28
29 void deleteFirst_1301213072(ListLagu &D, adr PLagu){
30     if (first(D) != NULL){
31         PLagu = first(D);
32         first(D) = next(PLagu);
33         next(PLagu) = NULL;
34
35         adr P = first(D);
36         while (next(P) != PLagu){
37             P = next(P);
38         }
39         next(P) = first(D);
40     }
41 }
42
43 void showSemuaLagu_1301213072(ListLagu D){
44     adr P = first(D);
45
46     cout << info(first(D)).Artis << endl;
47     cout << info(first(D)).Judul << endl;
48     cout << info(first(D)).Genre << endl;
49     cout << info(first(D)).Playtime << endl << endl;
50
51     while (next(P) != first(D)){
52         cout << info(P).Artis << endl;
53         cout << info(P).Judul << endl;
54         cout << info(P).Genre << endl;
55         cout << info(P).Playtime << endl << endl;
56
57         P = next(P);
58     }
59 }
60

```