

Deore Mufrad Hendrady  
1301223029

code  
header.h

```
h header.h > ...
1  #ifndef HEADER_H_INCLUDED
2  #define HEADER_H_INCLUDED
3  #include <iostream>
4  #include <string>
5
6  using namespace std;
7
8  struct jadwalPenerbangan
9  {
10     string kode, jenis, tanggal, waktu, asal, tujuan, kapasitas;
11 };
12
13
14 typedef struct elmJadwal *adr;
15 typedef jadwalPenerbangan infotype;
16 struct elmJadwal
17 {
18     infotype info;
19     adr next;
20 };
21
22 struct listJadwal
23 {
24     adr first;
25 };
26
27 void createListJadwal_1301223029(listJadwal &l);
28 adr createElmJadwal_1301223029(infotype x);
29 void insertLast_1301223029(listJadwal &l, adr p);
30 void showJadwal_1301223029(listJadwal l);
31 void deleteFirst_1301223029(listJadwal &l, adr &p);
32 adr searchJ_1301223029(listJadwal l, string asal, string tujuan, string tanggal);
33
34 #endif
```

source.cpp

```
1  #include "header.h"
2
3  void createListJadwal_1301223029(listJadwal &l){
4      l.first = NULL;
5  }
6
7
8  adr createElmJadwal_1301223029(infotype x){
9      adr p;
10     p = new elmJadwal;
11     p->info = x;
12     p->next = NULL;
13     return p;
14 }
15
16 void insertLast_1301223029(listJadwal &l, adr p){
17     adr q;
18     if (l.first == NULL){
19         l.first = p;
20     }else {
21         q = l.first;
22         while(q->next != NULL){
23             q = q->next;
24         }
25         q->next = p;
26     }
27 }
28
29 void showJadwal_1301223029(listJadwal l){
30     adr p;
31     p = l.first;
32     if (l.first == NULL){
33         cout << "Jadwal kosong " << endl;
34     }else {
35         while(p != NULL){
36             cout << p->info.kode << " " << p->info.jenis << " " << p->info.tanggal << " " <<
37                 p->info.waktu << " " << p->info.asal << " " << p->info.tujuan << " " << p->info.
38                 kapasitas << endl;
39             p = p->next;
40         }
41     }
42 }
43
44 void deleteFirst_1301223029(listJadwal &l, adr &p){
45     if(l.first == NULL){
46         cout << "Jadwal kosong " << endl;
47     }else {
48         p = l.first;
49         l.first = p->next;
50         delete p;
51     }
52 }
```

```

38     }
39 }
40
41
42 void deleteFirst_1301223029(listJadwal &l, adr &p){
43     if(l.first == NULL){
44         cout << "Jadwal kosong " << endl;
45     }else {
46         p = l.first;
47         l.first = p->next;
48         p->next = NULL;
49     }
50 }
51
52 adr searchJ_1301223029(listJadwal l, string asal, string tujuan, string tanggal){
53     adr p;
54     p = l.first;
55     if(l.first == NULL){
56         p = NULL;
57     }else {
58         while(p != NULL && p->info.asal != asal && p->info.tujuan != tujuan && p->info.tanggal
59             != tanggal){
60             p = p->next;
61         }
62     }
63     return p;
64 }
65

```

main.cpp

```

main.cpp > main()
1  #include "header.h"
2
3  int main()
4  {
5      listJadwal j;
6      infotype data;
7      adr p;
8      int n;
9
10     /*
11     3
12     QG680 Airbus_A320 8_Desember_2022 04.55 jakarta denpasar 180
13     QG250 ATR_72600 9_Desember_2022 12.55 surabaya malang 25
14     QG250 ATR_72601 9_Desember_2022 19.55 malang surabaya 25
15
16     */
17
18
19
20     createListJadwal_1301223029(j);
21     cin >> n;
22     for (int i = 1 ; i <= n ; i++){
23         cin >>data.kode;
24         cin >>data.jenis;
25         cin >>data.tanggal;
26         cin >>data.waktu;
27         cin >>data.asal;
28         cin >>data.tujuan;
29         cin >>data.kapasitas;
30         p = createElmJadwal_1301223029(data);
31         insertLast_1301223029(j,p);
32     }
33
34     deleteFirst_1301223029(j,p);
35     p = searchJ_1301223029(j,"surabaya","malang" , "9_Desember_2022" );
36     if (p != NULL){
37         cout << p->info.kode << " " << p->info.jenis << " " << p->info.tanggal << " " << p->info.
waktu << " " << p->info.asal << " " << p->info.tujuan << " " << p->info.kapasitas <<
endl;
38     }else {
39         cout << "Tidak ada " << endl;
40     }
41
42

```

output

```

~/STD-TP/TP-12 > on main ?1
./myprogram
3
    QG680 Airbus_A320 8_Desember_2022 04.55 jakarta denpasar 180
    QG250 ATR_72600 9_Desember_2022 12.55 surabaya malang 25
    QG250 ATR_72601 9_Desember_2022 19.55 malang surabaya 25
QG250 ATR_72600 9_Desember_2022 12.55 surabaya malang 25

```