Latihan

1. Buatlah program untuk menampilkan Daftar Alamat Mahasiswa menggunakan larik, sebagai ilustrasi bahwa penginputan data berupa nama, alamat dan hobi. Sehingga hasil outputnya sebagai berikut :

   Input Jumlah Data : 2

   Data 1
   Nama : Anita
   Alamat : Ipilo
   Hobi : Membaca
   Data 2
   Nama : Budi
   Alamat : Telaga
   Hobi : Jalan-jalan

DAFTAR MAHASISWA

No.	Nama	Alamat	Hobi
1	Anita	Ipilo	Membaca
2	Budi	Telaga	Jalan-jalan

Penyelesaian :

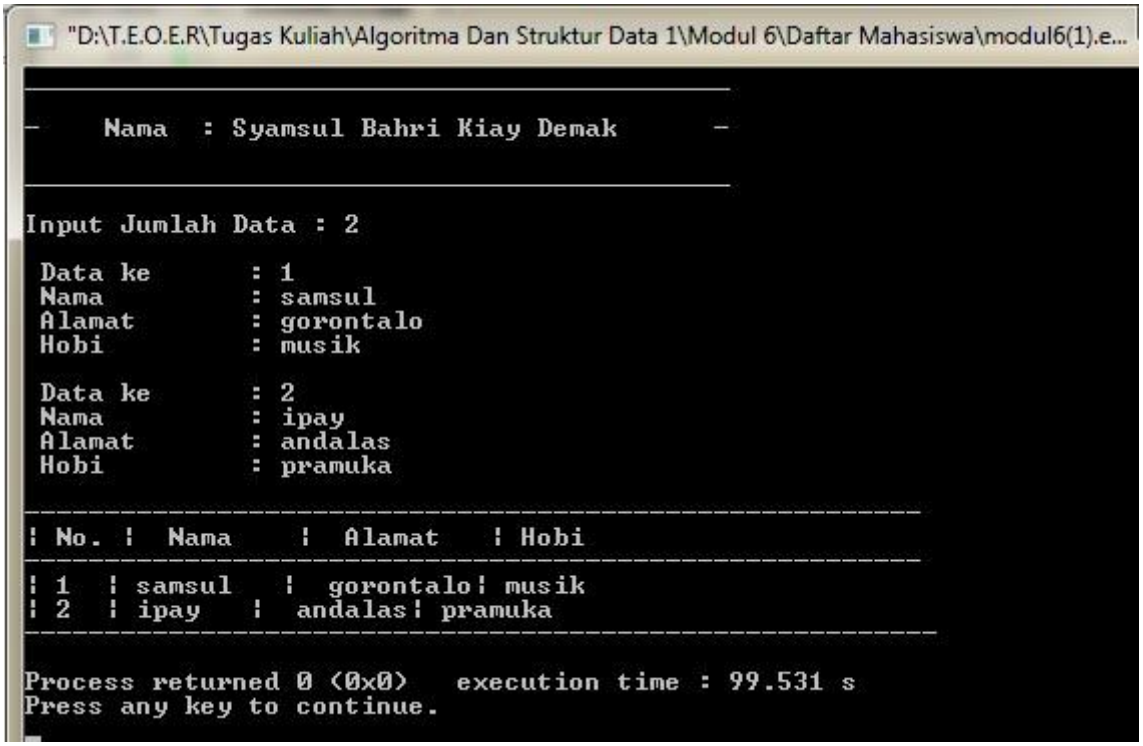
```
# include <iostream>
using namespace std;
int main ()
{
   int jum,i;
   char nm[20][15],al[25][25],hb[15][20];

   cout << "_____" <<endl;
   cout<<endl;
   cout << "-   Nama  : Syamsul Bahri Kiay Demak     -" <<endl;
   cout<<endl;
   cout << "_____" <<endl;
   cout << endl;

   cout<<"Input Jumlah Data : ";cin>>jum;
   cout<<""<<endl;

   for (i=1;i<=jum;i++)
{
   cout<<" Data ke     : "<<i<<endl;
   cout<<" Nama        : ";cin>>nm[i];
   cout<<" Alamat      : ";cin>>al[i];
   cout<<" Hobi        : ";cin>>hb[i];
   cout<<endl;
}  cout<<"-----------------------------------------------------------"<<endl;
         cout<<"| No."<<" |  Nama   "<<" |  Alamat " <<"  | Hobi" << "      "<<endl;
```

```
  cout<<"-------------------------------------------------------"<<endl;
        for(i=1;i<=jum;i++)
{
  cout<<"| "<<i<<"  | "<<nm[i]<<"   |  "<<al[i]<<"| "<<hb[i]<<"  "<<endl;
}
  cout<<"-------------------------------------------------------"<<endl;
}
```

Hasilnya :

```
1   # include <iostream>
2   using namespace std;
3   int main ()
4   {
5       int jum,i;
6       char nm[20][15],al[25][25],hb[15][20];
7
8       cout << "_____________________________________________" <<endl;
9       cout<<endl;
10      cout << "-    Nama  : Syamsul Bahri Kiay Demak      -" <<endl;
11      cout<<endl;
12      cout << "_____________________________________________" <<endl;
13      cout << endl;
14
15      cout<<"Input Jumlah Data : ";cin>>jum;
16      cout<<""<<endl;
17
18      for (i=1;i<=jum;i++)
19  {
20      cout<<" Data ke      : "<<i<<endl;
21      cout<<" Nama         : ";cin>>nm[i];
22      cout<<" Alamat       : ";cin>>al[i];
```

```
23      cout<<" Hobi         : ";cin>>hb[i];
24      cout<<endl;
25  }   cout<<"-------------------------------------------------------"<<endl;
26      cout<<"| No."<<" |  Nama   "<<" |  Alamat " <<"  | Hobi" << "      "<<endl;
27      cout<<"-------------------------------------------------------"<<endl;
28        for(i=1;i<=jum;i++)
29  {
30      cout<<"| "<<i<<"  | "<<nm[i]<<"   |  "<<al[i]<<"| "<<hb[i]<<"  "<<endl;
31  }
32      cout<<"-------------------------------------------------------"<<endl;
33  }
34
35
```


"D:\T.E.O.E.R\Tugas Kuliah\Algoritma Dan Struktur Data 1\Modul 6\Daftar Mahasiswa\modul6(1).e...
- Nama : Syamsul Bahri Kiay Demak -
Input Jumlah Data : 2
Data ke : 1
Nama : samsul
Alamat : gorontalo
Hobi : musik
Data ke : 2
Nama : ipay
Alamat : andalas
Hobi : pramuka
No.	Nama	Alamat	Hobi
1	samsul	gorontalo	musik
2	ipay	andalas	pramuka
Process returned 0 (0x0) execution time : 99.531 s
Press any key to continue.

2. Buatlah program untuk mengalikan kedua matrik berikut A dan B, dengan desain outputnya sebagai berikut :

   Jumlah Baris Matrik A ? 2
   Jumlah Kolom Matrik A ? 3
   Jumlah Kolom Matrik B ? 2

   Input Nilai Matrik A :
   A(1, 1) = 1
   A(1, 2) = 2
   A(1, 3) = 3

   A(2, 1) = 4
   A(2, 2) = 5
   A(2, 3) = 6

   Input Nilai Matrik B :
   B(1, 1) = 7
   B(1, 2) = 8

   B(2, 1) = 9
   B(2, 2) = 10

   B(3, 1) = 11
   B(3, 2) = 12

   Hasil Perkalian Matrik :
    58 64
   139 154

Penyelesaian :

```
#include <iostream>
using namespace std;
int main(){

 double a[10][10],b[10][10],c[10][10];
 int CC,e,f,g;
 cout <<"_____" <<endl;
 cout<<endl;
 cout << "      Syamsul Bahri Kiay Demak          " <<endl;
 cout<<endl;
 cout << "_____" <<endl;
 cout<<endl;
 cout<<"matriks A : "<<endl;
 for (e=1; e<=2;e++){
    for (f=1;f<=3;f++){
```

```
      cout<<"A("<<e<<","<<f<<") : ";cin>>a[e][f];}}
cout<<endl<<"matriks B : "<<endl;
 for (e=1; e<=3;e++){
    for (f=1;f<=2;f++){
       cout<<"B("<<e<<","<<f<<") :";cin>>b[e][f];}}
 cout<<endl;

 for (e=1;e<=3;e++){
    for (f=1;f<=2;f++){
       c[e][f]=0;
       for (g=1;g<=3;g++){
          CC=a[e][g]*b[g][f];
          c[e][f]=c[e][f]+CC;}}}

 cout<<"Hasil Perkalian Matriks [A x B] : "<<endl;
 for (e=1;e<=2;e++){
    for (f=1;f<=2;f++){
       cout<<"    "<<c[e][f];}
cout<<endl;}
}
```

Hasilnya :

```
 1  #include <iostream>
 2  using namespace std;
 3  int main(){
 4
 5   double a[10][10],b[10][10],c[10][10];
 6   int CC,e,f,g;
 7   cout <<"_____" <<endl;
 8   cout<<endl;
 9   cout << "        Syamsul Bahri Kiay Demak          " <<endl;
10   cout<<endl;
11   cout << "_____" <<endl;
12   cout<<endl;
13   cout<<"matriks A : "<<endl;
14   for (e=1; e<=2;e++){
15       for (f=1;f<=3;f++){
16         cout<<"A("<<e<<","<<f<<") : ";cin>>a[e][f];}}
17  cout<<endl<<"matriks B : "<<endl;
18   for (e=1; e<=3;e++){
19       for (f=1;f<=2;f++){
20           cout<<"B("<<e<<","<<f<<") :";cin>>b[e][f];}}
21   cout<<endl;
22
```

```
23      for (e=1;e<=3;e++){
24          for (f=1;f<=2;f++){
25              c[e][f]=0;
26              for (g=1;g<=3;g++){
27                  CC=a[e][g]*b[g][f];
28                  c[e][f]=c[e][f]+CC;}}}
29
30      cout<<"Hasil Perkalian Matriks [A x B] : "<<endl;
31      for (e=1;e<=2;e++){
32          for (f=1;f<=2;f++){
33              cout<<"    "<<c[e][f];}
34  cout<<endl;}
35  }
```


"D:\T.E.O.E.R\Tugas Kuliah\Algoritma Dan Struktur Data 1\Modul 6\Matriks\Modul 6_2 (Matriks).ex...
Syamsul Bahri Kiay Demak
matriks A :
A(1,1) : 1
A(1,2) : 2
A(1,3) : 3
A(2,1) : 1
A(2,2) : 2
A(2,3) : 3
matriks B :
B(1,1) :1
B(1,2) :2
B(2,1) :1
B(2,2) :2
B(3,1) :1
B(3,2) :2
Hasil Perkalian Matriks [A x B] :
6 12
6 12