# LAPORAN PRAKTEK ALGORITMA PEMROGRAMAN



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PROGRAM STUDI TEKNIK INFORMATIKA

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```
prak.cpp
 1
       #include <iostream>
       #include <cstdlib>
 3
       #include <iomanip>
 4
      using namespace std;
 6 class Matriks {
             friend ostream& operator<<(ostream&, Matriks&);
             friend istream& operator>>(istream&, Matriks&);
 8
 9
         public:
10
               void baca_matriks();
11
 12
               void matriks_jumlah(const Matriks&, const Matriks&);
               void perkalian_matriks(const Matriks&, const Matriks&);
13
14
               void cetak_matriks();
15
         private:
16
               int A[10][10];
               int baris, kolom;
17
 18 L
 19
 20 - void Matriks::baca_matriks (){
            int i,j;
 22
            for (i=0; i<baris; i++)
 23 —
               for (j=0; j<kolom; j++) {</pre>
                  cout << "Data [" << i+1 << "," << j+1 << "] : ";
 24
 25
                   cin >> A[i][j];
 26
 27
 29 void Matriks::matriks_jumlah(const Matriks& matriks1, const Matriks& matriks2){
           int i,j;
 30
 31
           baris = matriks1.baris;
 32
           kolom = matriks1.kolom;
           for (i=0; i<baris; i++)
33
           for (j=0; j<kolom; j++)
34
 35
           A[i][j]=matriks1.A[i][j]+matriks2.A[i][j];
 36
           cetak_matriks();
 37
 38
39 void Matriks::perkalian_matriks(const Matriks& matriks1, const Matriks& matriks2){
           int i,j,k;
40
           int barkol;
```

```
prak.cpp
43
           kolom = matriks1.kolom;
 44
           barkol = matriks1.kolom;
 45
           for (i=0; i<baris; i++)</pre>
 46 -
               for (j=0; j<kolom; j++) {</pre>
 47
                   A[i][j] = 0;
 48
                    for (k=0; k<barkol; k++)
 49
                       A[i][j] = A[i][j] + matriks1.A[i][k] * matriks2.A[k][j];
 50
 51
               cetak_matriks();
 52
 53
54 _ void Matriks::cetak_matriks (){
            int i,j;
 55
            for (i=0; i<baris; i++){
 56
                for (j=0; j<kolom; j++)
 57
 58
                    cout << setw(5) << A[i][j] << " ";
 59
                    cout << endl;
 60
    L
 61
 62
63 istream& operator>>(istream& in, Matriks& A) {
           cout << "Banyak baris : ";
 64
 65
           in >> A.baris;
           cout << "Banyak kolom : ";
 66
           in >> A.kolom;
 67
 68
           cout << "Masukkan data matriks\n";</pre>
           A.baca_matriks();
 69
           cout << "Matriks yang dibuat adalah : \n";
 70
 71
           A.cetak_matriks();
 72
           return in;
 73
 74
 75 - ostream& operator<<(ostream& out, Matriks& A) {
             int i,j;
 76
 77 🗀
             for (i=0; i<A.baris; i++){
 78
                 for (j=0; j<A.kolom; j++)</pre>
                     cout << setw(5) << A.A[i][j] << " ";
 79
 80
                     cout << endl;
 81
 82
              return out;
 83
84
         85 — int main(int argc, char** argv) {
                    Matriks matriks1, matriks2;
         87
                    Matriks jumlah;
         88
         89
                    cout << "Memasukkan data matriks I \n";
         90
                    cin >> matriks1;
                    cout << "Memasukkan data matriks II\n";</pre>
         91
         92
                    cin >> matriks2;
         93
         94
                    jumlah.matriks_jumlah(matriks1,matriks2);
         95
                    cout << "Hasil Penjumlahan : \n";
         96
                    jumlah.cetak_matriks();
         97
                    jumlah.perkalian_matriks(matriks1,matriks2);
         98
                    cout << "Hasil Perkalian : \n";
         99
                    jumlah.cetak matriks();
        100
        101
                    return 0;
        102
        103
```

## E:\KULIAH\SEMUA PRAKTIK II\Alpro\Prak Alpro\8\kode\cpp\prak.exe

```
Memasukkan data matriks I
Banyak baris : 2
Banyak kolom : 2
Masukkan data matriks
Data [1,1] : 1
Data [1,2] : 2
Data [2,1] : 3
Data [2,2] : 4
  Matriks yang dibuat adalah :
Memasukkan data matriks II
Banyak baris : 2
Banyak kolom : 2
Masukkan data matriks
Data [1,1] : 3
Data [1,2] : 4
Data [2,1] : 5
Data [2,2] : 6
Matriks yang dibuat adalah :
3 4
                 5
4
8
                                          6
                                     6
10
```

### E:\KULIAH\SEMUA PRAKTIK II\Alpro\Prak Alpro\8\kode\cpp\prak.exe

```
3
  Memasukkan data matriks II
Banyak baris : 2
Banyak kolom : 2
  Masukkan data matriks
Data [1,1] : 3
Data [1,2] : 4
Data [2,1] : 5
Data [2,2] : 6
Matriks yang dibuat adalah :
                             6
            48
                          10
Asil 1

4

8 10

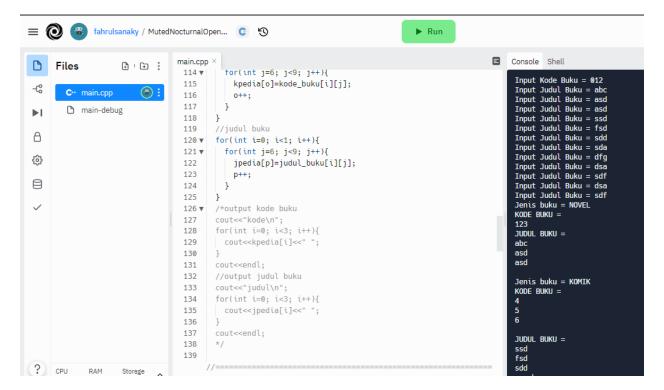
13 16

29 36

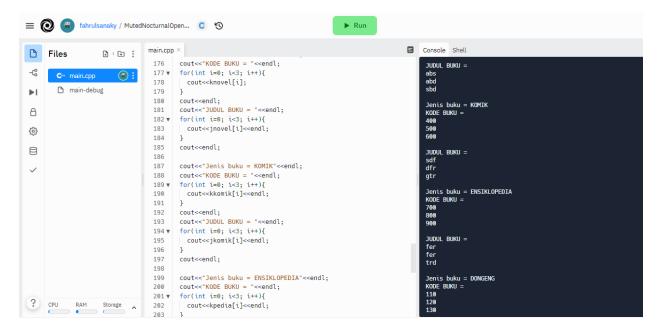
Hasil Perkalian :

13 16

29 36
  Hasil Penjumlahan :
```



### Input kode dan judul buku



Output

# Link

https://replit.com/@fahrulsanaky/MutedNocturnalOpengroup#main.cpp

https://github.com/142Eko/Prak-alpro/tree/master/8/kode