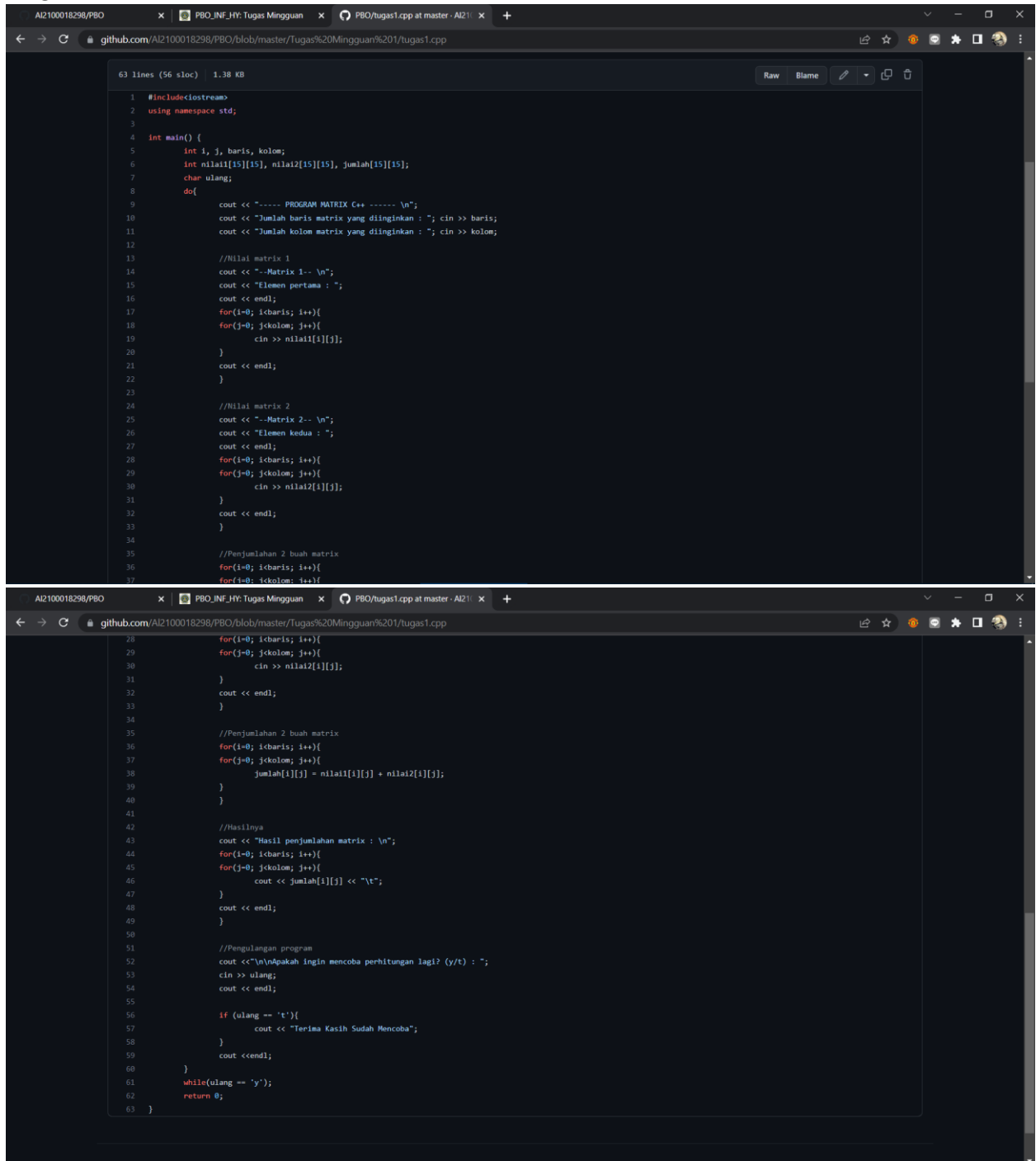


Al Kautsar Russetya Tamora/2100018298/F

Pemrograman Berorientasi Objek – Tugas Mingguan 1

Link Github : <https://github.com/Al2100018298/PBO/tree/master/Tugas%20Mingguan%201>

1. Program C++



The image shows a GitHub repository for a C++ program. The repository is named "PBO" and is owned by "Al2100018298". The file "tugas1.cpp" is selected, showing 63 lines of code. The code is a C++ program that demonstrates matrix operations. It includes headers for `iostream` and `string`, and uses the `std` namespace. The `main` function starts by declaring variables for the number of rows and columns, and for the matrices. It then prompts the user to enter the number of rows and columns. After that, it prompts the user to enter the elements of the first matrix. It then prompts the user to enter the elements of the second matrix. Finally, it calculates the sum of the two matrices and displays the result. The program also includes a loop to allow the user to run the program again.

```
1 #include<iostream>
2 using namespace std;
3
4 int main() {
5     int i, j, baris, kolom;
6     int nilai1[15][15], nilai2[15][15], jumlah[15][15];
7     char ulang;
8     do{
9         cout << "----- PROGRAM MATRIX C++ ----- \n";
10        cout << "Jumlah baris matrix yang diinginkan : "; cin >> baris;
11        cout << "Jumlah kolom matrix yang diinginkan : "; cin >> kolom;
12
13        //Nilai matrix 1
14        cout << "--Matrix 1-- \n";
15        cout << "Elemen pertama : ";
16        cout << endl;
17        for(i=0; i<baris; i++){
18            for(j=0; j<kolom; j++){
19                cin >> nilai1[i][j];
20            }
21        }
22        cout << endl;
23
24        //Nilai matrix 2
25        cout << "--Matrix 2-- \n";
26        cout << "Elemen kedua : ";
27        cout << endl;
28        for(i=0; i<baris; i++){
29            for(j=0; j<kolom; j++){
30                cin >> nilai2[i][j];
31            }
32        }
33        cout << endl;
34
35        //Penjumlahan 2 buah matrix
36        for(i=0; i<baris; i++){
37            for(j=0; j<kolom; j++){
38                jumlah[i][j] = nilai1[i][j] + nilai2[i][j];
39            }
40        }
41
42        //Hasilnya
43        cout << "Hasil penjumlahan matrix : \n";
44        for(i=0; i<baris; i++){
45            for(j=0; j<kolom; j++){
46                cout << jumlah[i][j] << "\t";
47            }
48            cout << endl;
49        }
50
51        //Pengulangan program
52        cout << "\n\nApakah ingin mencoba perhitungan lagi? (y/t) : ";
53        cin >> ulang;
54        cout << endl;
55
56        if (ulang == 't'){
57            cout << "Terima Kasih Sudah Mencoba";
58        }
59        cout << endl;
60    }
61    while(ulang == 'y');
62    return 0;
63 }
```

```
D:\Data\kaka\UAD\matku\SMK 3\PSO\Tugas Minggu 1\tugas1.exe
----- PROGRAM MATRIX C++ -----
Jumlah baris matrix yang diinginkan : 5
Jumlah kolom matrix yang diinginkan : 5
--Matrix 1--
Elemen pertama :
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
```

```
D:\Data\kaka\UAD\matku\SMK 3\PSO\Tugas Minggu 1\tugas1.exe
20
21
22
23
24
25
--Matrix 2--
Elemen kedua :
2
4
6
8
1
3
5
7
9
10
12
14
16
18
20
11
```

```
D:\Data\kaka\UAD\matiku\SMT 3\PBO\Tugas Mingguan 1\tugas1.exe

11
13
14
17
19

20
22
24
26
28

Hasil penjumlahan matrix :
3      6      9      12      6
9      12     15     18     20
23     26     29     32     35
27     30     32     36     39
41     44     47     50     53

Apakah ingin mencoba perhitungan lagi? (y/t) : t

Terima Kasih Sudah Mencoba

-----
Process exited after 272.1 seconds with return value 0
Press any key to continue . . .
```

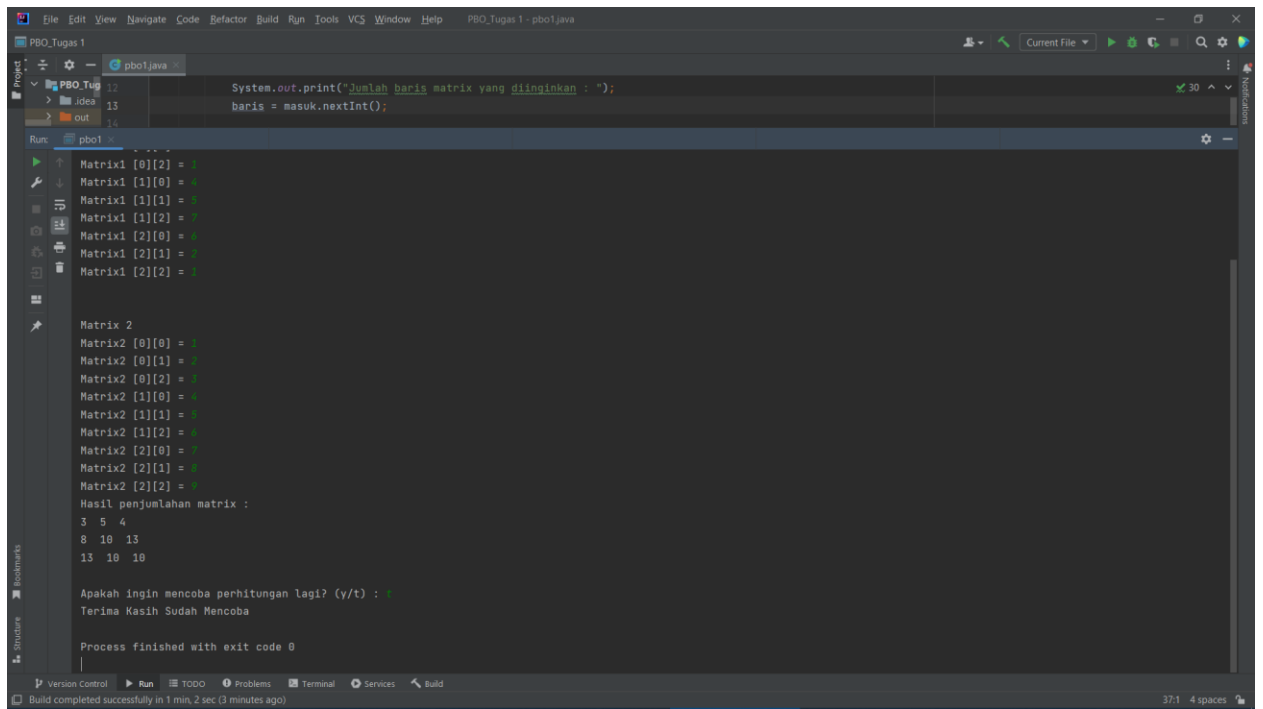
2. Program Java

```
AI2100018298/PBO x PBO_INF_HY: Tugas Mingguan x PBO/pbo1.java at master · AI2100018298/PBO · GitHub
github.com/AI2100018298/PBO/blob/master/Tugas%20Mingguan%201/pbo1.java

1 import java.util.Scanner;
2 class pbo1 {
3     public static void main(String[] args) {
4         Scanner masuk = new Scanner(System.in);
5         int[][] matrix1, matrix2, jumlah;
6         int baris, kolom;
7         char ulang;
8
9
10        do{
11            System.out.print("----PROGRAM MATRIX JAVA---\n");
12            System.out.print("Jumlah baris matrix yang diinginkan : ");
13            baris = masuk.nextInt();
14
15            System.out.print("Jumlah kolom matrix yang diinginkan : ");
16            kolom = masuk.nextInt();
17
18            System.out.println();
19            matrix1 = new int[baris][kolom]; matrix2 = new int[baris][kolom]; jumlah = new int[baris][kolom];
20
21            //Nilai Matrix 1
22            System.out.println("Matrix 1");
23            for(int i=0; i<baris; i++){
24                for(int j=0; j<kolom; j++){
25                    System.out.print("Matrix1 ["+i+"] ["+j+"] = ");
26                    int isimatrix = masuk.nextInt();
27                    matrix1[i][j] = isimatrix;
28                }
29            }
30            System.out.println("\n");
31
32            //Nilai Matrix 2
33            System.out.println("Matrix 2");
34            for(int i=0; i<baris; i++){
35                for(int j=0; j<kolom; j++){
36                    System.out.print("Matrix2 ["+i+"] ["+j+"] = ");
37                    int isimatrix = masuk.nextInt();
38
39                    matrix2[i][j] = isimatrix;
40                }
41            }
42            System.out.println("\n");
43            ulang = 'y';
44        } while (ulang == 'y');
```

```
31
32 //Nilai Matrix 2
33 System.out.println("Matrix 2");
34 for(int i=0; i<baris; i++){
35     for(int j=0; j<kolom; j++){
36         System.out.print("Matrix2 ["+i+"["+j+"] = ");
37         int isimatrix = masuk.nextInt();
38
39         matrix2[i][j] = isimatrix;
40     }
41 }
42
43 //Penjumlahan 2 buah matrix
44 for(int i = 0; i<baris; i++){
45     for(int j = 0; j<kolom; j++){
46         jumlah[i][j] = matrix1[i][j] + matrix2[i][j];
47     }
48 }
49
50 //Hasilnya
51 System.out.println("Hasil penjumlahan matrix : ");
52 for (int i = 0; i<baris; i++){
53     for(int j = 0; j<kolom; j++){
54         System.out.print(jumlah[i][j]+" ");
55     }
56     System.out.println();
57 }
58
59 //Pengulangan program
60 System.out.println();
61 System.out.print("Apakah ingin mencoba perhitungan lagi? (y/t) : ");
62 ulang = masuk.next().charAt(0);
63 if(ulang == 't'){
64     System.out.println("Terima Kasih Sudah Mencoba");
65 }
66 }
67 while(ulang == 'y');
68 }
69 }
```

```
File Edit View Navigate Code Refactor Build Run Tools VCS Window Help PBO_Tugas1 pbo1.java
PBO_Tugas1
PBO_Tug
> jdea
> out
j6
Run pbo1
"C:\Program Files\Java\jdk1.8.0_181\bin\java.exe" ...
---PROGRAM MATRIX JAVA---
Jumlah baris matrix yang diinginkan : 3
Jumlah kolom matrix yang diinginkan : 3
Matrix 1
Matrix1 [0][0] = 1
Matrix1 [0][1] = 2
Matrix1 [0][2] = 3
Matrix1 [1][0] = 4
Matrix1 [1][1] = 5
Matrix1 [1][2] = 6
Matrix1 [2][0] = 7
Matrix1 [2][1] = 8
Matrix1 [2][2] = 9
Matrix 2
Matrix2 [0][0] = 1
Matrix2 [0][1] = 2
Matrix2 [0][2] = 3
Matrix2 [1][0] = 4
Matrix2 [1][1] = 5
Matrix2 [1][2] = 6
Matrix2 [2][0] = 7
Matrix2 [2][1] = 8
Matrix2 [2][2] = 9
Hasil penjumlahan matrix :
3 5 4
Version Control Run TODO Problems Terminal Services Build
Build completed successfully in 1 min, 2 sec (2 minutes ago) 37:1 4 spaces
```



```
File Edit View Navigate Code Refactor Build Run Tools VCS Window Help PBO_Tugas 1 - pbo1.java
PBO_Tugas 1
pbo1.java
12 System.out.print("Jumlah baris matrix yang diinginkan : ");
13 baris = masuk.nextInt();
14
Run: pbo1
Matrix1 [0][2] = 3
Matrix1 [1][0] = 8
Matrix1 [1][1] = 10
Matrix1 [1][2] = 13
Matrix1 [2][0] = 13
Matrix1 [2][1] = 10
Matrix1 [2][2] = 10

Matrix 2
Matrix2 [0][0] = 3
Matrix2 [0][1] = 8
Matrix2 [0][2] = 13
Matrix2 [1][0] = 8
Matrix2 [1][1] = 10
Matrix2 [1][2] = 13
Matrix2 [2][0] = 13
Matrix2 [2][1] = 10
Matrix2 [2][2] = 10

Hasil penjumlahan matrix :
3 5 4
8 10 13
13 10 10

Apakah ingin mencoba perhitungan lagi? (y/t) :
Terima Kasih Sudah Mencoba

Process finished with exit code 0
Build completed successfully in 1 min, 2 sec (3 minutes ago) 37/1 4 spaces
```