

## LEMBAR JAWABAN TUGAS

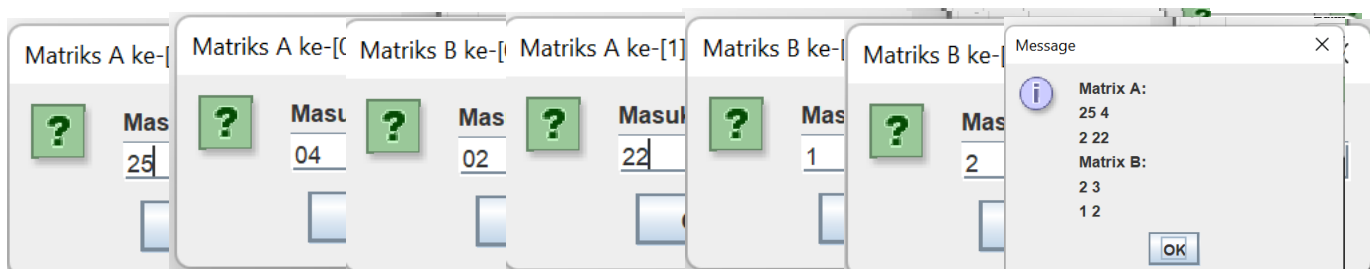
Nama : Melani 212310049 / TI-21-PA1

Mata Kuliah : Lab PBO Praktikum 5 Array

Dosen : Febri Damatraseta Fairuz, S.T, M.Kom / 3320190306

### Latihan01

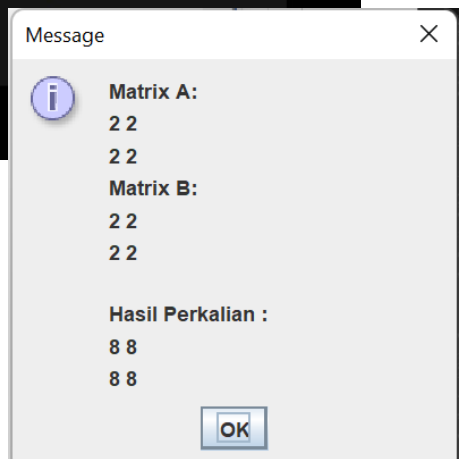
```
1 import java.util.ArrayList;
2 import java.util.Arrays;
3 import javax.swing.JOptionPane;
4
5 public class Latihan01 {
6     public static void
7     main(String[] args) {
8         int length = 2;
9         String value = "";
10
11         ArrayList<ArrayList<Integer> >
12         matriksA =
13         new
14         ArrayList<ArrayList<Integer> >();
15
16         ArrayList<ArrayList<Integer> >
17         matriksB =
18         new
19         ArrayList<ArrayList<Integer> >();
20
21         for(int i=0; i<length;
22         i++) {
23             for(int j=0; j<length;
24             j++) {
25                 matriksA.add(new
26                 ArrayList<Integer>());
27                 value =
28                 JOptionPane.showInputDialog(null,"M
29                 asukkan angka: ","Matriks A ke-
30                 ["+i+"]"+"
31                 ["+j+"]",JOptionPane.QUESTION_MESSA
32                 GE);
33                 matriksA.get(i).add(j,
34                 Integer.parseInt(value));
35             }
36         }
37
38         String output = "Matrix A:
39         \n";
40         for(int i=0; i<length;
41         i++) {
42             for(int j=0; j<length;
43             j++) {
44                 output +=
45                 matriksA.get(i).get(j) + " ";
46             }
47             output += "\n";
48         }
49
50         String output1="Matrix B:
51         \n";
52         for(int i=0; i<length;
53         i++) {
54             for(int j=0; j<length;
55             j++) {
56                 output1 +=
57                 matriksB.get(i).get(j) + " ";
58             }
59             output1 += "\n";
60         }
61
62         JOptionPane.showMessageDialog(null,
63         output+output1);
64     }
65 }
```



## Latihan02

```
1 import java.util.ArrayList;
2 import java.util.Arrays;
3 import javax.swing.JOptionPane;
4
5 public class Latihan02 {
6
7     public static void
8     main(String[] args) {
9         int length = 2, jumlah = 0;
10        String value = "";
11
12        ArrayList<ArrayList<Integer> >
13        matriksA =
14        new
15        ArrayList<ArrayList<Integer> >();
16        ArrayList<ArrayList<Integer> >
17        matriksB =
18        new
19        ArrayList<ArrayList<Integer> >();
20
21        for(int i =0; i<length;
22        i++) {
23            for(int j=0; j<length;
24            j++) {
25                matriksA.add(new
26                ArrayList<Integer>());
27                value =
28                JOptionPane.showInputDialog(null,"M
29                asukkan angka: ","Matriks A ke-
30                ["+i+"]"+"
31                ["+j+"]",JOptionPane.QUESTION_MESSA
32                GE);
33                matriksA.get(i).add(j,
34                Integer.parseInt(value));
35            }
36        }
37        for(int i =0; i<length;
38        i++) {
39            for(int j=0; j<length;
40            j++) {
41                matriksB.add(new
42                ArrayList<Integer>());
43                value =
44                JOptionPane.showInputDialog(null,"M
45                asukkan angka: ","Matriks B ke-
46                ["+i+"]"+"
47                ["+j+"]",JOptionPane.QUESTION_MESSA
48                GE);
49                matriksB.get(i).add(j,
50                Integer.parseInt(value));
51            }
52        }
53    }
54 }
```

```
31        String output = "Matrix A:
32        \n";
33        for(int i =0; i<length;
34        i++) {
35            for(int j=0; j<length;
36            j++) {
37                output +=
38                matriksA.get(i).get(j) + " ";
39            }
40            output += "\n";
41        }
42        String output1="Matrix B:
43        \n";
44        for(int i =0; i<length;
45        i++) {
46            for(int j=0; j<length;
47            j++) {
48                output1 +=
49                matriksB.get(i).get(j) + " ";
50            }
51            output1 += "\n";
52        }
53        String output2 = "\nHasil
54        Perkalian : \n";
55        for(int i =0; i<length;
56        i++) {
57            for(int j=0; j<length;
58            j++) {
59                for (int k = 0; k
60                < length; k++) {
61                    //jumlah =
62                    jumlah + matrixA[i][k] * matrixA[k]
63                    [j];
64                    jumlah +=
65                    matriksA.get(i).get(k) *
66                    matriksB.get(k).get(j);
67                }
68                output2 += jumlah
69                + " ";
70                jumlah = 0;
71            }
72            output2 += "\n";
73        }
74        JOptionPane.showMessageDialog(null,
75        output+output1+output2);
76    }
77 }
```



### Latihan03

```
1 import javax.swing.JOptionPane;
2 import java.util.ArrayList;
3 import java.util.Arrays;
4
5 public class Latihan03 {
6     public static void
7     main(String[] args) {
8         JOptionPane jop = new
9         JOptionPane();
10        int ordo = 2;
11        String output = "";
12
13        ArrayList<ArrayList<String>
14        > field = new
15        ArrayList<ArrayList<String> >();
16
17        for (int i = 0; i <= ordo;
18        i++) {
19            field.add(new
20            ArrayList<String>());
21        }
22
23        field.get(0).add(0, "Nama
24        Lengkap");
25        field.get(0).add(1,
26        "Alamat");
27        field.get(0).add(2, "No
28        Telp");
29
30        for(int i = 0; i <= ordo;
31        i++) {
32            output +=
33            field.get(0).get(i) + " ";
34        }
35
36        output += "\n";
37
38        for(int i = 0; i <= ordo;
39        i++) {
40            for(int j = 0; j <=
41            ordo; j++) {
42                String isi =
43                jop.showInputDialog(null, "Masukkan
44                " + field.get(0).get(j) + ":",
45                "Data array ke-" + i,
46                jop.QUESTION_MESSAGE);
47                field.get(1).add(j,
48                isi);
49            }
50
51            output +=
52            field.get(1).get(j) + " | ";
53        }
54
55        output += "\n";
56    }
57
58    jop.showMessageDialog(null,
59    output);
60 }
```

Data array ke-0



Masukkan Nama Lengkap:

ani

Data array ke-0



Masukkan Alamat:

disini

Data array ke-0



Masukkan No Telp:

085280295301

Data array ke-1



Masukkan Nama Lengkap:

shelby

Data array ke-1



Masukkan Alamat:

dimana mana

Data array ke-1



Masukkan No Telp:

085280295301

Data array ke-2



Masukkan Nama Lengkap:

bibu

Data array ke-2



Masukkan Alamat:

taman eden

Data array ke-2



Masukkan No Telp:

085280295301

OK

Cancel

Message



Nama Lengkap Alamat No Telp

ani | disini | 085280295301 |  
shelby | dimana mana | 085280295301 |  
bibu | taman eden | 085280295301 |

OK

## Latihan04

```
1 import javax.swing.JOptionPane;
2 import java.util.ArrayList;
3 import java.util.Arrays;
4
5 public class Latihan04 {
6     public static void
7     main(String[] args) {
8         JOptionPane jop = new
9         JOptionPane();
10        int ordo = 2;
11        String output = "";
12
13        ArrayList<ArrayList<String>
14        > field = new
15        ArrayList<ArrayList<String> >();
16
17        for (int i = 0; i <= ordo;
18        i++) {
19            field.add(new
20            ArrayList<String>());
21
22            field.get(0).add(0, "Nama
23            Lengkap");
24            field.get(0).add(1,
25            "Alamat");
26            field.get(0).add(2, "No
27            Telp");
28
29            for(int i = 0; i <= ordo;
30            i++) {
31                output +=
32                field.get(0).get(i) + " ";
33            }
34
35            output += "\n";
36
37            for(int i = 0; i <= ordo;
38            i++) {
39                for(int j = 0; j <=
40                ordo; j++) {
41                    String isi =
42                    jop.showInputDialog(null, "Masukkan
43                    " + field.get(0).get(j) + ":",
44                    "Data array ke-" + i,
45                    JOptionPane.QUESTION_MESSAGE);
46                    field.get(1).add(j,
47                    isi);
48
49                    output +=
50                    field.get(1).get(j) + " | ";
51                }
52
53                output += "\n";
54            }
55
56            jop.showMessageDialog(null,
57            output);
58        }
59    }
60 }
```

Data array ke-0

Masukkan Nama Lengkap:  
ani

Data array ke-0

Masukkan Alamat:  
rumah tuhan

Data array ke-0

Masukkan No Telp:  
085280295301

Data array ke-1

Masukkan Nama Lengkap:  
asu

Data array ke-1

Masukkan Alamat:  
hmm

Data array ke-1

Masukkan No Telp:  
029292929292

Data array ke-2

Masukkan Nama Lengkap:  
aaaa

Data array ke-2

Masukkan Alamat:  
hmm

Data array ke-2

Masukkan No Telp:  
525325246532

Message

Nama Lengkap Alamat No Telp  
ani | rumah tuhan | 085280295301 |  
asu | hmm | 029292929292 |  
aaaa | hmm | 525325246532 |

OK