

PRAKTIKUM PEMROGRAMAN DASAR I : ARRAY DUA DIMENSI

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KELAS : B1

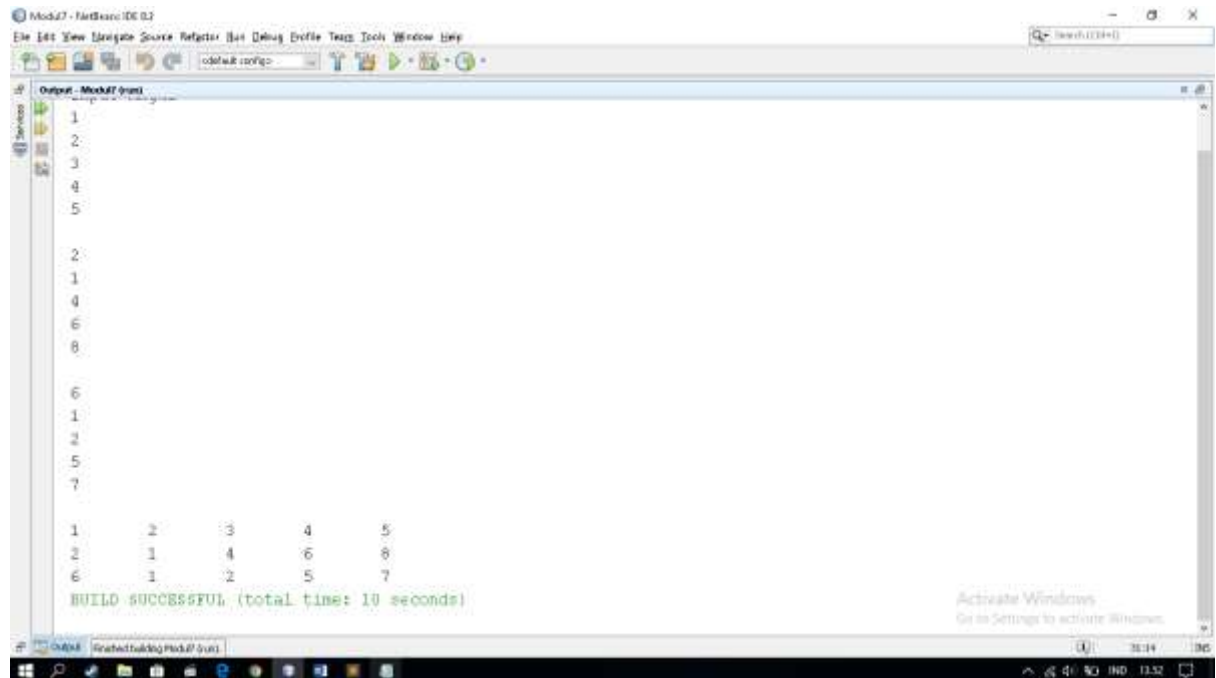
Aktivitas

1. Buatlah program untuk memasukkan 5 angka ke dalam baris pertama sebuah array dua dimensi. Lanjutkan dengan memasukkan 5 angka ke dalam baris kedua dan ketiga.

Script :

```
1. /*
2.  * To change this license header, choose License Headers in Project Properties.
3.  * To change this template file, choose Tools | Templates
4.  * and open the template in the editor.
5.  */
6. package modul7;
7. import java.util.Scanner;
8. /**
9.  *
10.  * @author Irfan
11.  */
12. public class Modul7 {
13.
14.     /**
15.      * @param args the command line arguments
16.      */
17.     public static void main(String[] args) {
18.         // TODO code application logic here
19.         Scanner sc =new Scanner(System.in);
20.         int i, j, kolom, baris;
21.
22.         kolom =3;
23.         baris =5;
24.
25.         int [][] a =new int [kolom][baris];
26.
27.         System.out.println("Input Angka");
28.         for (i=0; i<3;i++){
29.             for (j=0; j<5; j++){
30.                 a[i][j]= sc.nextInt();
31.             }
32.             System.out.println();
33.         }
34.         for ( i=0; i<a.length; i++){
35.             for(j=0; j<a[i].length; j++){
36.                 System.out.print(a[i][j]+"\\t");
37.             }
38.             System.out.println();
39.         }}
40. }
```

Screenshot :



2. Buatlah program untuk mengimplementasikan array dua dimensi berukuran 3 x 4, di mana nilai-nilai yang diberikan harus diinputkan dari keyboard!

Script :

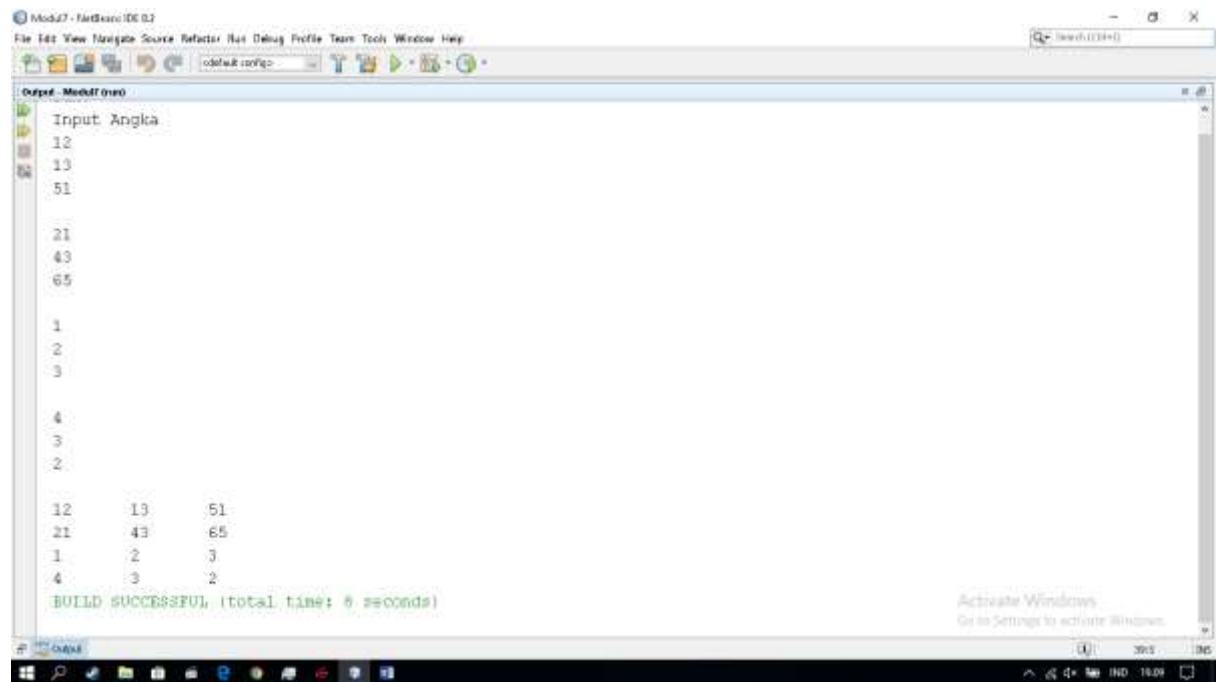
```
1. /*
2.  * To change this license header, choose License Headers in Project Properties.
3.  * To change this template file, choose Tools | Templates
4.  * and open the template in the editor.
5.  */
6. package modul7;
7. import java.util.Scanner;
8. /**
9.  *
10.  * @author Irfan
11.  */
12. public class Modul71 {
13.
14.     /**
15.      * @param args the command line arguments
16.      */
17.     public static void main(String[] args) {
18.         // TODO code application logic here
19.         Scanner sc = new Scanner(System.in);
20.         int i, j, kolom, baris;
21.
22.         kolom = 4;
23.         baris = 3;
24.
25.         int [][] a = new int [kolom][baris];
26.
27.         System.out.println("Input Angka");
28.         for (i=0; i<4;i++){
29.             for (j=0; j<3; j++){
30.                 a[i][j]= sc.nextInt();
31.             }
32.             System.out.println();
33.         }
```

```

34.     for ( i=0; i<a.length; i++){
35.         for(j=0; j<a[i].length; j++){
36.             System.out.print(a[i][j]+"\\t");
37.         }
38.         System.out.println();
39.     }}
40. }

```

Screenshot :



Latihan

Buatlah *project* dengan tampilan seperti di bawah ini, dan gunakan array dua dimensi untuk mempermudah pembuatan *project* Anda.

	y	$\sin(x) \cdot \cos(y)$	$\cos(x) \cdot \sin(y)$	$\sin(x) \cdot \sin(y)$	$\cos(x) \cdot \cos(y)$
45	45	Output	Output	Output	Output
135	135	Output	Output	Output	Output
225	225	Output	Output	Output	Output
315	315	Output	Output	Output	Output

Latihan ini menggunakan array dua dimensi yang terdiri dari 4 baris dan 6 kolom. Nilai x dan y ditentukan diawal, dengan memanfaatkan perulangan untuk menginisialisasinya. Hitunglah nilai-nilai pada kolom-kolom setelah kolom x dan kolom y . Untuk menghitung nilai-nilai tersebut gunakanlah class Math

Script :

```

1.  /*
2.  * To change this license header, choose License Headers in Project Properties.
3.  * To change this template file, choose Tools | Templates
4.  * and open the template in the editor.
5.  */
6.  package modul7;

```

```

7.
8. import static java.lang.Math.cos;
9. import static java.lang.Math.sin;
10. /**
11.  *
12.  * @author Irfan
13.  */
14. public class Sincos {
15.     public static void main(String[] args) {
16.
17.         double xy[][] = {{45, 45}, {135, 135}, {225, 225},{315, 315}};
18.         double a, b, c, d;
19.
20.         System.out.print("");
21.         System.out.println("|X\t|Y\t|Sin(x)*Cos(y)\t|Cos(x)*Sin(y)\t|Sin(x)*Sin(y)\t|Cos(x)*Cos(y)");
22.
23.         int i ;
24.         for (i=0; i< xy.length; i++){
25.             for (int h=0; h<2;h++){
26.                 System.out.print(xy[i][h]+"\\t");
27.             }
28.             System.out.print(a = Math.sin(xy[i][0]) * cos (xy[i][1]));
29.             System.out.print(b = Math.cos (xy[i][0]) * sin (xy[i][1]));
30.             System.out.print(c = Math.sin(xy[i][0]) * sin (xy[i][1]));
31.             System.out.print(d = Math.cos(xy[i][0]) * cos (xy [i][1]));
32.             System.out.println();
33.         }
34.
35.         /*for (int z=0; z <4 ; z++){
36.             for (int h=0; h<6; h++){
37.
38.             }*/
39.         System.out.println("");
40.     }
41. }

```

Screenshot :

```

Output - Modu7 (run)
run:
|X      |Y      |Sin(x)*Cos(y) |Cos(x)*Sin(y) |Sin(x)*Sin(y) |Cos(x)*Cos(y)
45.0    45.0    0.4469983318002790.4469983318002790.72403680806458510.27596319193541496
135.0   135.0   -0.0880229732356057-0.08802297323560570.0076090246837475360.9921909753162524
225.0   225.0   -0.34164186251776174-0.341641862517761740.8650764820902538.13492351790974705
315.0   315.0    0.496940998506475660.496940998506475660.55522358194399720.44477641805001283

BUILD SUCCESSFUL (total time: 0 seconds)

```