

PERTEMUAN 15

ARRAY MULTIDIMENSI (2D)

ARRAY 2D

Sama seperti array 1 D Cuma bedanya kurung kotaknya ada 2 seperti contoh dibawah ini :

```
int[][] arrx; // Cara :  
arrx = new int[3][3];
```

Kurung
kotaknya ada 2

Besaran [x] [y]

Array 2D

- Penulisan Array 2D

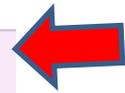
```
class Array2D {  
public static void main(String[] args) {  
int[][] arrx; // Cara 1 Array 2 Dimensi  
arrx = new int[3][3];  
arrx[0][0] = 1;  
arrx[0][1] = 2;  
arrx[0][2] = 3;  
arrx[1][0] = 4;  
arrx[1][1] = 5;  
arrx[1][2] = 6;  
arrx[2][0] = 7;  
arrx[2][1] = 8;  
arrx[2][2] = 9;  
System.out.println("Nilai arrx[0][0] : " + arrx[0][0]);  
System.out.println("Nilai arrx[0][1] : " + arrx[0][1]);  
System.out.println("Nilai arrx[0][2] : " + arrx[0][2]);  
System.out.println("Nilai arrx[1][0] : " + arrx[1][0]);  
System.out.println("Nilai arrx[1][1] : " + arrx[1][1]);  
System.out.println("Nilai arrx[1][2] : " + arrx[1][2]);  
System.out.println("Nilai arrx[2][0] : " + arrx[2][0]);  
System.out.println("Nilai arrx[2][1] : " + arrx[2][1]);  
System.out.println("Nilai arrx[2][2] : " + arrx[2][2]);  
}
```

Array 2D

- Cara penulisan ke 2

```
int[][] array = {{10,20,30},{40,50,60},{70,80,90}} ; // C
//Dimensi dgn ukuran 3 * 3 = 9
System.out.println("Nilai array[0] : " + array[0][0]);
System.out.println("Nilai array[0] : " + array[0][1]);
System.out.println("Nilai array[0] : " + array[0][2]);
System.out.println("Nilai array[1] : " + array[1][0]);
System.out.println("Nilai array[1] : " + array[1][1]);
System.out.println("Nilai array[1] : " + array[1][2]);
System.out.println("Nilai array[2] : " + array[2][0]);
System.out.println("Nilai array[2] : " + array[2][1]);
System.out.println("Nilai array[2] : " + array[2][2]);
}
}
```

```
public class matriks_sum_2x3 {  
  
    public static void main(String[] args)  
    {  
        double m[][]={{7, 2, 32}, {3, 5, 12}};  
        double n[][]={{8, 21, 3}, {3, 6, 10}};  
  
        //menampilkan matriks m :  
        System.out.println("matriks m :");  
        for (int i=0; i<m.length; i++)  
        {  
            for(int j=0; j<m[i].length; j++)  
            {  
                System.out.print(m[i][j] + " ");  
            }  
            System.out.println();  
        }  
  
        //menampilkan matriks n :  
        System.out.println("matriks n :");  
        for (int i=0; i<n.length; i++)  
        {  
            for(int j=0; j<n[i].length; j++)  
            {  
                System.out.print(n[i][j] + " ");  
            }  
            System.out.println();  
        }  
  
        //hasil [m+n] :  
        System.out.println("penjumlahan m+n :");  
        for (int i=0; i<m.length; i++)  
        {  
            for(int j=0; j<m[i].length; j++)  
            {  
                System.out.print(m[i][j]+n[i][j] + " ");  
            }  
            System.out.println();  
        }  
    }  
}
```

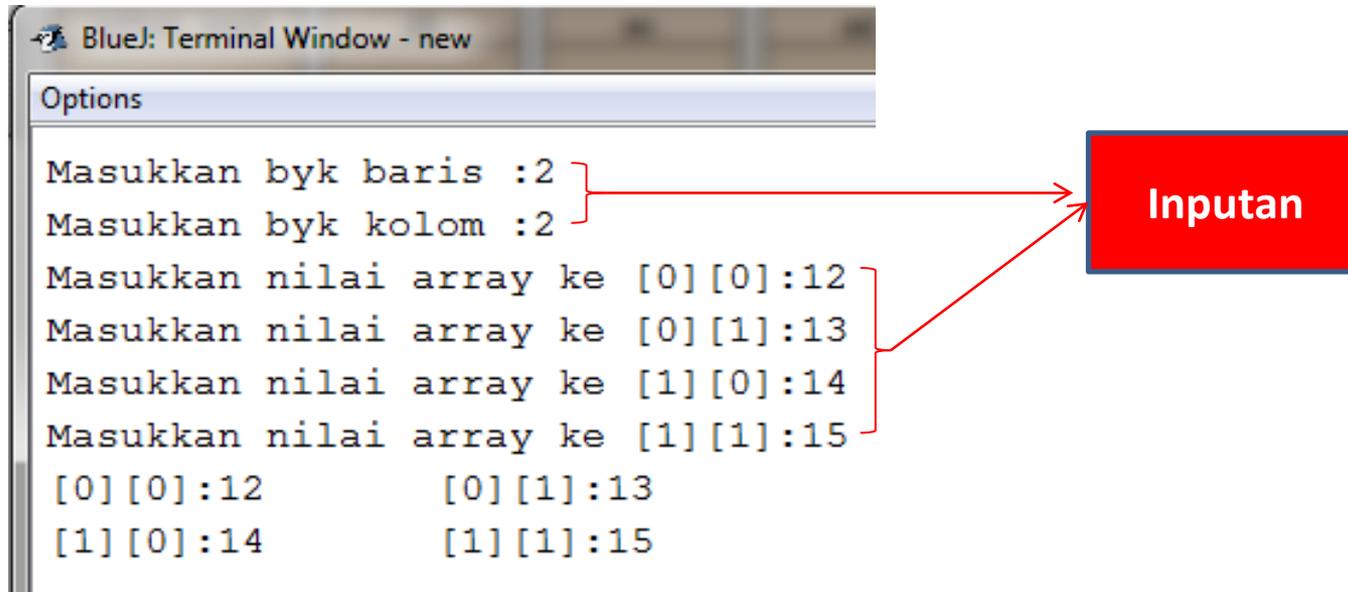


Contoh
Coding
Array 2D
kombinasi
dengan
FOR

latihan

- Latihan

1. Buatlah inputan array 2D dengan output dibawah ini



```
BlueJ: Terminal Window - new
Options
Masukkan byk baris :2
Masukkan byk kolom :2
Masukkan nilai array ke [0][0]:12
Masukkan nilai array ke [0][1]:13
Masukkan nilai array ke [1][0]:14
Masukkan nilai array ke [1][1]:15
[0][0]:12      [0][1]:13
[1][0]:14      [1][1]:15
```

The image shows a terminal window with a red box labeled "Inputan" to its right. Two red arrows point from the "Inputan" box to the two lines of input in the terminal: "Masukkan byk baris :2" and "Masukkan byk kolom :2".