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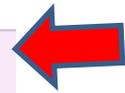
```java
class Array2D {
public static void main(String[] args) {
int[][] arrx; // Cara 1 Array 2 Dimensi
arrx = new int[3][3];
arrx[0][0] = 1;
arrx[0][1] = 2;
arrx[0][2] = 3;
arrx[1][0] = 4;
arrx[1][1] = 5;
arrx[1][2] = 6;
arrx[2][0] = 7;
arrx[2][1] = 8;
arrx[2][2] = 9;
System.out.println("Nilai arrx[0][0]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

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

```java
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();
            }
    }
}
```
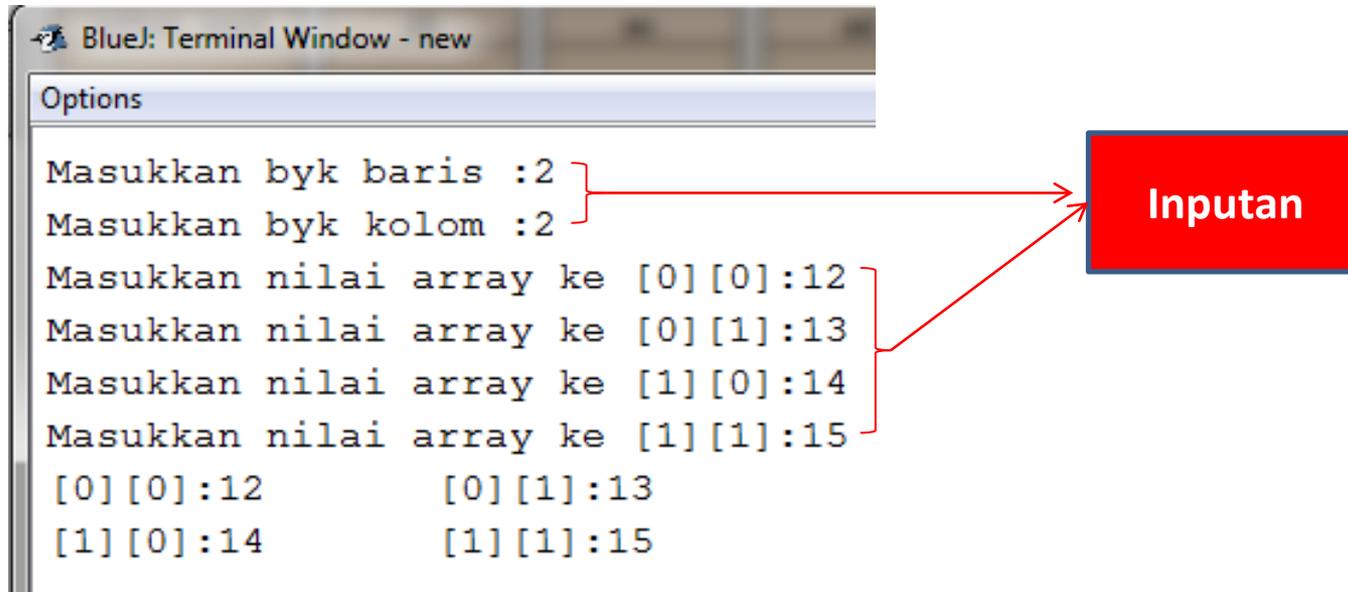
Contoh Coding Array 2D kombinasi dengan FOR

latihan

- Latihan

1. Buatlah inputan array 2D dengan output dibawah ini