Tiopan Indra Wahyudi– 201143501548 – R5L

PROJECT KELOMPOK 8 – R5L

```java
import java.util.Scanner;
public class matrik_boris {
 public static void main (String [] xxx){
 Scanner bil = new Scanner (System.in);
 //menentukan banyak baris dan kolom
 System.out.println("Jumlah baris matrik: ");
 int b = bil.nextInt ();
 System.out.println("Jumlah kolom matrik: ");
 int c = bil.nextInt ();
 int a [][] = new int [b][c];
 int d [][] = new int [b][c];
 //input metrik A dan B
 System.out.println("Mulah input matrik A ");
 for (int i=0 ; i<b ; ++i){
 for (int y=0 ; y<c ; ++y)
 { System.out.print("[" +(i)+ "][" +(y)+ "]: ");
 a[i][y] = bil.nextInt (); }
 System.out.println("");
 }
 System.out.println("Mulai input matrik B ");
 for (int i=0 ; i<b ; ++i){
 for (int y=0 ; y<c ; ++y)
 { System.out.print("[" +(i)+ "][" +(y)+ "]: "); Nurul Afrianti – 201143501514 – R5L
 d[i][y] = bil.nextInt (); }
```
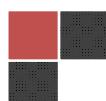
```java
System.out.println("");

}

//cetak output metrik A dan B

System.out.println(" cetak matrik A ");

for (int i=0 ; i<b ; ++i){

for (int y=0 ; y<c ; ++y)

{ System.out.println("data ke [" +(i)+ "][" +(y)+ "] : " +a[i][y]);}

System.out.println("");

}

System.out.println(" cetak matrik B ");

for (int i=0 ; i<b ; ++i){

for (int y=0 ; y<c ; ++y)

{ System.out.println("data ke [" +(i)+ "][" +(y)+ "] : " +d[i][y]);}

System.out.println("");

}

// masukkan operator

while(true){

String op,re;

Scanner operator = new Scanner(System.in);

System.out.print("Masukkan operator ( + or - ) : ");

op = operator.nextLine();

// perintah

if (op.equalsIgnoreCase("+")){

System.out.println("hasil penjumlahan metrik A dan B"); Nurul Afrianti – 201143501514 – R5L

int e [][] = new int [b][c];

for (int i=0 ; i<b ; ++i){

for (int y=0 ; y<c ; ++y)
```
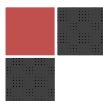
```java
{ e[i][y]=a[i][y]+d[i][y];

System.out.println("data ke [" +(i)+ "][" +(y)+ "] : " +e[i][y]);

}

System.out.println("");

}

}

if (op.equalsIgnoreCase("-")){

System.out.println("hasil pengurangan metrik A dan B");

int e [][] = new int [b][c];

for (int i=0 ; i<b ; ++i){

for (int y=0 ; y<c ; ++y)

{ e[i][y]=a[i][y]-d[i][y];

System.out.println("data ke [" +(i)+ "][" +(y)+ "] : " +e[i][y]);

}

System.out.println("");

}

}

Scanner retry = new Scanner(System.in);

System.out.print("Mau coba lagi? (y/n) : ");

re = retry.nextLine();

if (re.equalsIgnoreCase("n")) System.exit(0);

} Nurul Afrianti – 201143501514 – R5L

}

}
```

Output:

```
 cetak matrik B
data ke [0][0] : 6
data ke [0][1] : 5
data ke [0][2] : 6

data ke [1][0] : 7
data ke [1][1] : 8
data ke [1][2] : 8

data ke [2][0] : 8
data ke [2][1] : 7
data ke [2][2] : 6

Masukkan operator ( + or - ) : +
hasil penjumlahan metrik A dan B
data ke [0][0] : 7
data ke [0][1] : 10
data ke [0][2] : 12

data ke [1][0] : 14
data ke [1][1] : 16
data ke [1][2] : 17

data ke [2][0] : 17
data ke [2][1] : 15
data ke [2][2] : 13

Mau coba lagi? (y/n) : |
```

----

class string_dlm_array{

public static void main(String[] args) {

String str="Ilmu Komputer UGM"; Nurul Afrianti – 201143501514 – R5L

char[] arraystr=str.toCharArray();

System.out.println("String : " +str);

System.out.println("String Baru [toCharArray]: ");

for (int i=0; i<arraystr.length ; i++){

System.out.println(arraystr[i]);

}

System.out.println("String Baru [getChars]: ");

char[] getstr=new char[10];

str.getChars(5,13,getstr,0);

for (int i=0; i<getstr.length ; i++){
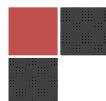
```java
System.out.println(getstr[i]);

}

}

}
```

Output:

```java
public class StringImmutableTest {

public static void main(String[] args){

String s = "ini string immutable ";

System.out.println("sebelum operasi concat nilai s : " + s);

//append tidak merubah variabel s, tetapi dibuat object baru

//dan object baru ini direturn sedangkan variabel s nilainya tetap

s.concat("concat");

System.out.println("setelah operasi concat nilai s : " + s);

String concat = s + s.concat("concat") + " object baru";
```

}

}
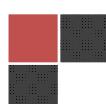
Output:
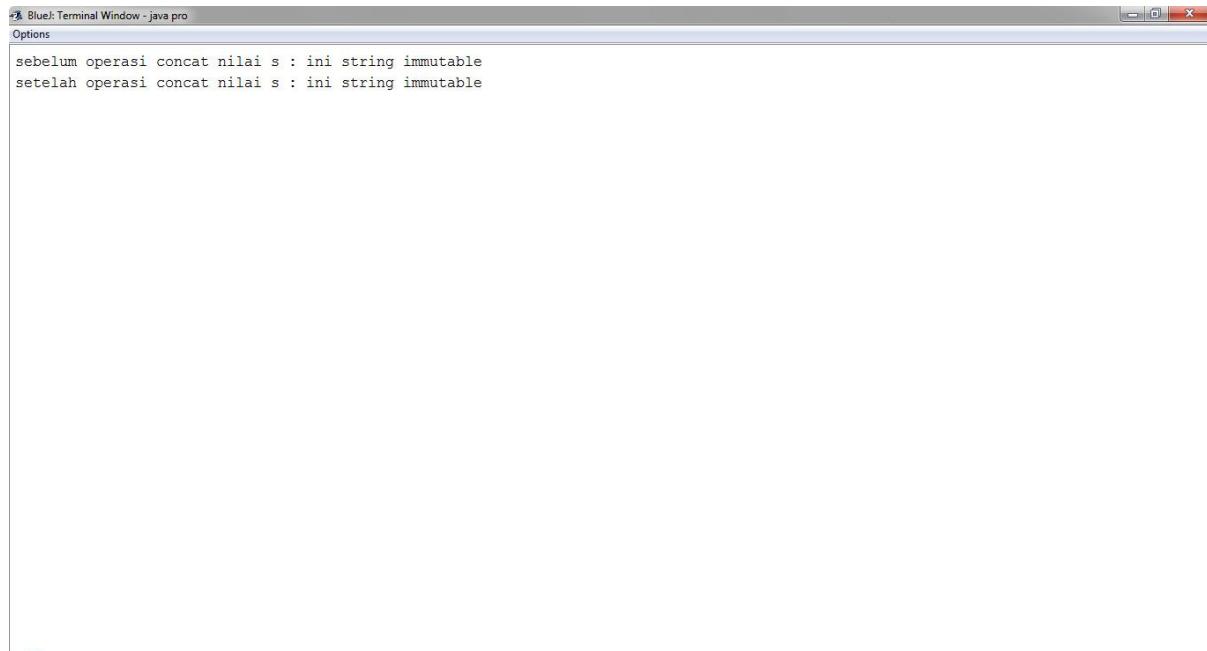

```
BlueJ: Terminal Window - java pro
Options
sebelum operasi concat nilai s : ini string immutable
setelah operasi concat nilai s : ini string immutable
```