PBO

Latihan 1

05 September 2024

Nama	NIM	Kelas
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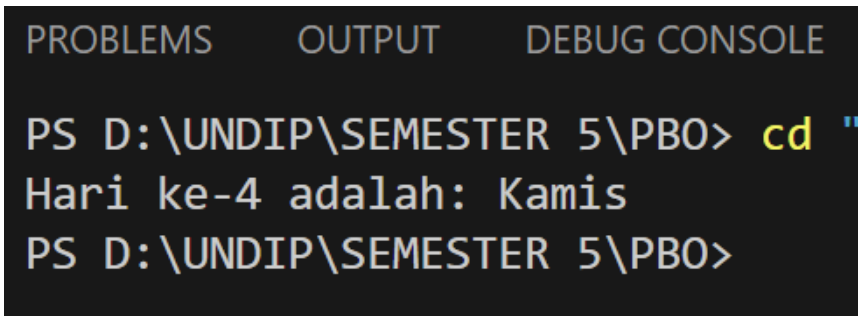
Tugas : mengerjakan soal yang telah dituliskan di papan tulis

Link github : https://github.com/Mutiara1626/Tugas1_PBO

1. Menampilkan hari ke[4] = Kamis

```
class soal1 {
    public static void main(String[] args) {
        int[] jumlahHari;

        jumlahHari = new int[12];

        jumlahHari[0] = 31;
        jumlahHari[1] = 28;
        jumlahHari[2] = 31;
        jumlahHari[3] = 30;
        jumlahHari[4] = 31;
        jumlahHari[5] = 30;
        jumlahHari[6] = 31;

        String[] hariDalamSeminggu = {"Minggu", "Senin", "Selasa",
"Rabu", "Kamis", "Jumat", "Sabtu"};

        int hariKe4 = 4;

        System.out.println("Hari ke-4 adalah: " +
hariDalamSeminggu[hariKe4]);
    }
}
```

Hasil :



Gambar 1. 1 Output 1

2. Terdapat dua kondisi dalam satu file

a. ketika k++ - dihapus

b. ketika I < 3 dimana 3x3 tetapi masih memakai k++

```
public class soal2 {

    public static void main(String[] args) {
        kondisi1();
        kondisi2();
    }

    public static void kondisi1() {
        int[][] duaD = new int[2][3]; // Array 2x3
        int k = 1;

        System.out.println("Kondisi 1: Tanpa k++");
        for (int i = 0; i < 2; i++) {
            for (int j = 0; j < 3; j++) {
                duaD[i][j] = k * 10;
                System.out.print(duaD[i][j] + " ");
            }
            System.out.println();
        }
        System.out.println();
    }

    public static void kondisi2() {
        int[][] duaD = new int[3][3];
        int k = 1;

        System.out.println("Kondisi 2: Ukuran 3x3 dengan k++");
        for (int i = 0; i < 3; i++) {
            for (int j = 0; j < 3; j++) {
                duaD[i][j] = k * 10;
                System.out.print(duaD[i][j] + " ");
                k++;
            }
            System.out.println();
        }
        System.out.println();
    }
}
```

Hasil :

```
PS D:\UNDIP\SEMESTER 5\PBO> cd "d:\
Kondisi 1: Tanpa k++
10 10 10
10 10 10

Kondisi 2: Ukuran 3x3 dengan k++
10 20 30
40 50 60
70 80 90

PS D:\UNDIP\SEMESTER 5\PBO>
```

Gambar 1. 2 Output 2

3. Terdapat kondisi dengan definisi

   S1 = Mutiara Sabrina R

   S2 = 21120122140129

   S3 = S1.concat(S2)

```
public class soal3 {
    public static void main(String[] args) {
        String s1 = "Mutiara Sabrina R ";
        String s2 = "21120122140129";

        String s3 = s1.concat(s2);

        System.out.println("String 1: " + s1);
        System.out.println("String 2: " + s2);
        System.out.println("String 3: " + s3);
    }
}
```

   Hasil :

```
PS D:\UNDIP\SEMESTER 5\PBO> cd "d:\UNDIP\SEME
String 1: Mutiara Sabrina R
String 2: 21120122140129
String 3: Mutiara Sabrina R 21120122140129
PS D:\UNDIP\SEMESTER 5\PBO>
```

Gambar 1. 3 Output 3

4. Terdapat kondisi yang didefinisikan :
   a. replace (nama -> a = 0)
   b. replaceAll (nama -> a)
   c. Lower (String nama)
   d. Upper (String nama)

```
public class soal4 {
    public static void main(String[] args) {
        String nama = "Mutiara Sabrina R";

        // Replace (mengganti huruf 'a' menjadi '0')
        String kondisi1 = nama.replace('a', '0');
        System.out.println("Replace (nama -> a ≈ 0): " + kondisi1);

        // Mengubah seluruh string menjadi 'a'
        String kondisi2 = nama.replaceAll(".", "a");
        System.out.println("Replace All (nama -> a): " + kondisi2);

        // Lowercase
        String kondisi3 = nama.toLowerCase();
        System.out.println("Lower (string nama): " + kondisi3);

        // Uppercase
        String kondisi4 = nama.toUpperCase();
        System.out.println("Upper (string nama): " + kondisi4);
    }
}
```

Hasil :

```
PS D:\UNDIP\SEMESTER 5\PBO> cd "d:\UNDIP\SEM
Replace (nama -> a ≈ 0): Muti0r0 S0brin0 R
Replace All (nama -> a): aaaaaaaaaaaaaaaa
Lower (string nama): mutiara sabrina r
Upper (string nama): MUTIARA SABRINA R
PS D:\UNDIP\SEMESTER 5\PBO>
```

Gambar 1. 4 Output 4

5. Terdapat soal :

Buatlah program untuk menampilkan operasi logika OR, XOR, dan NOT

```
public class soal5 {
    public static void main(String[] args) {
        boolean A = true;
        boolean B = false;

        // OR
        boolean hasilOR = A || B;
        System.out.println("A OR B = " + hasilOR);

        // XOR
        boolean hasilXOR = A ^ B;
        System.out.println("A XOR B = " + hasilXOR);

        // NOT
        boolean hasilNOTA = !A;
        boolean hasilNOTB = !B;
        System.out.println("NOT A = " + hasilNOTA);
        System.out.println("NOT B = " + hasilNOTB);
    }
}
```

Hasil :

```
PS D:\UNDIP\SEMESTER 5\PBO> cd "d:
A OR B = true
A XOR B = true
NOT A = false
NOT B = true
PS D:\UNDIP\SEMESTER 5\PBO>
```

Gambar 1. 5 Output 5