Pemrograman Berorientasi Objek

(Tugas 2)

Disusun Oleh:

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PROGRAM STUDI S-1 TEKNIK INFORMATIKA

FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM

UNIVERSITAS PADJADJARAN

JATINANGOR

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1. Tugas2_1

```java
package com.mycompany.tugas21;
import java.util.Scanner;

/**
 *
 * @author prame
 */
public class Tugas21 {
    public static void main(String args[]){
        Scanner sc = new Scanner(System.in);

        System.out.print("Masukkan nama : ");
        String nama = sc.nextLine();
        System.out.print("Masukkan NPM : ");
        String npm = sc.nextLine();

        System.out.print("Masukkan nilai ke-1 : ");
        int n1 = sc.nextInt();
        System.out.print("Masukkan nilai ke-2 : ");
        int n2 = sc.nextInt();
        System.out.print("Masukkan nilai ke-3 : ");
        int n3 = sc.nextInt();

        int rata = ((n1+n2+n3)/3);

        System.out.println();
        System.out.println("Nama  = " + nama);
        System.out.println("NPM   = " + npm);
        nilaiAkhir(rata);

        sc.close();
    }

    static void nilaiAkhir(int rata){
        String mutu = "", kelulusan = "";
        if (100>=rata && rata>=80){
            mutu = "A";
            kelulusan = "Lulus";
        } else if (80>rata && rata>=68){
            mutu = "B";
            kelulusan = "Lulus";
        } else if (68>rata && rata>=55){
            mutu = "C";
```

```
            kelulusan = "Lulus";
        } else if (55>rata && rata>=45){
            mutu = "D";
            kelulusan = "Gagal";
        } else if (45>rata && rata>=0){
            mutu = "E";
            kelulusan = "Gagal";
        }
        System.out.println("Nilai = " + mutu + " (" + kelulusan + ")");
    }
}
```

```
Masukkan nama : Prames
Masukkan NPM : 140810210059
Masukkan nilai ke-1 : 90
Masukkan nilai ke-2 : 80
Masukkan nilai ke-3 : 90

Nama  = Prames
NPM   = 140810210059
Nilai = A (Lulus)
```

2. Tugas2_2

```
package com.mycompany.tugas22;
import java.util.Scanner;

/**
 *
 * @author prame
 */
public class Tugas22 {

    public static void main(String[] args) {
        int num = 0;
        String word = "Default";

        System.out.print("Input (1-10): ");
        Scanner sc = new Scanner(System.in);
        num = sc.nextInt();

        System.out.println();

        //if-else statement
        System.out.println("[If-Else statement]");
        System.out.println(num + " = " + ifElse(num));
```

```java
        System.out.println();

        //Switch statement
        System.out.println("[Switch-Case Statement]");

        System.out.println(num + " = " + switchStatement(num));

        sc.close();
    }

    static String ifElse(int num) {
        String word = "";

        if(num == 1)
            word = "Satu";
        else if(num == 2)
            word = "Dua";
        else if(num == 3)
            word = "Tiga";
        else if(num == 4)
            word = "Empat";
        else if(num == 5)
            word = "Lima";
        else if(num == 6)
            word = "Enam";
        else if(num == 7)
            word = "Tujuh";
        else if(num == 8)
            word = "Delapan";
        else if(num == 9)
            word = "Sembilan";
        else if(num == 10)
            word = "Sepuluh";
        else {
           word = "Invalid Number";
        }

        return word;

    }

    static String switchStatement(int num) {
        String word = "";

        switch (num) {
```

```
            case 1:
                word = "Satu";
                break;
            case 2:
                word = "Dua";
                break;
            case 3:
                word = "Tiga";
                break;
            case 4:
                word = "Empat";
                break;
            case 5:
                word = "Lima";
                break;
            case 6:
                word = "Enam";
                break;
            case 7:
                word = "Tujuh";
                break;
            case 8:
                word = "Delapan";
                break;
            case 9:
                word = "Sembilan";
                break;
            case 10:
                word = "Sepuluh";
                break;
            default:
                word = "Invalid Number";
                break;
        }

        return word;
    }
}
```

```
Input (1-10): 9

[If-Else statement]
9 = Sembilan

[Switch-Case Statement]
9 = Sembilan
```

3. Tugas2_3

```java
package com.mycompany.tugas23;
import java.util.Scanner;

/**
 *
 * @author prame
 */
public class Tugas23 {

    public static void main(String[] args) {
        String nama = "";
        int gol = 0;
        long gapok = 0;
        float potongan = 0, tunjangan = 0;

        Scanner sc = new Scanner(System.in);
        System.out.print("Nama\t\t: ");
        nama = sc.nextLine();


        System.out.print("Golongan\t: ");
        gol = sc.nextInt();

        switch (gol) {
            case 1:
                gapok = 1500000;
                potongan = 0.01f;
                tunjangan = 0.1f;
                break;
                case 2:
                gapok = 2000000;
                potongan = 0.02f;
                tunjangan = 0.12f;
                break;
            case 3:
                gapok = 3000000;
                potongan = 0.02f;
                tunjangan = 0.12f;
                break;
            case 4:
                gapok = 5000000;
                potongan = 0.04f;
```

```
                tunjangan = 0.15f;
                break;

                default:
                break;
            }

        long gatot = (long) (gapok + (gapok*tunjangan) -
(gapok*potongan));

        System.out.println("Gaji Pokok\t: " + gapok);
        System.out.println("Tunjangan\t: " + (int) (tunjangan*100) + "%");
        System.out.println("Potongan\t: " + (int) (potongan*100) + "%");

        System.out.println();

        System.out.println("Gaji Total\t: " + gatot);

        sc.close();
    }


}
```

```
Nama            : Prames
Golongan        : 1
Gaji Pokok      : 1500000
Tunjangan       : 10%
Potongan        : 1%

Gaji Total      : 1635000
```

4. Tugas2_4

```
package com.mycompany.tugas24;
import java.util.Scanner;
/**
 *
 * @author prame
 */
public class Tugas24 {

    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);

        System.out.print("Masukkan baris : ");
        int n = sc.nextInt();
```

```
        System.out.println();
        loopFor(n);

        System.out.println();
        loopWhile(n);

        sc.close();
    }

    static void loopFor(int n){
        int i, j;
        for(i=n; i>=1; i--){
            System.out.print(i + ".");
            for(j=i; j>=1; j--){
                System.out.print(" *");
            }
            System.out.println();
        }
    }

    static void loopWhile(int n){
        int j, i=1;
        while(i<=n){
            System.out.print(i + ".");
            j=1;
            while(j<=i){
                System.out.print(" *");
                j++;
            }
            i++;
            System.out.println();
        }
    }
}
```

```
Masukkan baris : 3

3. * * *
2. * *
1. *

1. *
2. * *
3. * * *
```

5. Tugas2_5

```java
package com.mycompany.tugas25;
import java.util.Scanner;

/**
 *
 * @author prame
 */
public class Tugas25 {
    public static void main(String[] args) {
        Scanner scan = new Scanner(System.in);
        int i, j, hasil;

        System.out.print("Masukkan angka : ");
        int x = scan.nextInt();

        System.out.print("Masukkan pangkat : ");
        int n = scan.nextInt();

        if(n == 0){
            hasil = 1;
            System.out.println("Hasil = " + hasil);
        } else {
            whileStatement(x, n);
            doWhileStatement(x, n);
            forStatement(x, n);
        }
    }

    static void whileStatement(int x, int n) {
        int i = 1, hasil = x;

        while(i < n){
            hasil *= x;
            i++;
        }

        System.out.println("Hasil dari loop While = " + hasil);
    }

    static void doWhileStatement(int x, int n) {
        int i = 1, hasil = x;

        do{
            if(n == 1){
                hasil = x;
```

```
                i++;
            } else {
                hasil *= x;
                i++;
            }
        } while(i<n);

        System.out.println("Hasil dari loop Do While = " + hasil);
    }

    static void forStatement(int x, int n) {
        int i = 1, hasil = x;

        hasil = x;

            for(i = 1; i < n; i++){
                hasil *= x;
            }

        System.out.println("Hasil dari loop For = " + hasil);
    }


}
```

```
Masukkan angka : 3
Masukkan pangkat : 3
Hasil dari loop While = 27
Hasil dari loop Do While = 27
Hasil dari loop For = 27
```