Session Date	:	13 September 2019
Semester	:	Gasal
Subject	:	1132102 – Pemrograman Berorientasi Objek
Week/Session	:	1/3
Key Topics	:	Control Statement
Objectives	:	- Students understand how to use if, if-elseif, switch, ternary if-else, for, and do-while control. - Students understand how to use control statement in GUI base and console base.
Duration	:	100 *minutes*
Delivery	:	-
Deadline of delivery	:	-
Place of delivery	:	-
Lecturer	:	TMP
Instructor	:	SEP

1. Kontrol if

```
public class KontrolIf {
    int nilaiUTS = 55; //misal batas minimal C = 55
    boolean lulus;
    String ket;

    public static void main(String[] args) {
        KontrolIf Nilaiku = new KontrolIf();
        /* Nilaiku = Obyek baru yang diciptakan dari class
"KontrolIf" */

        int nilaiutsaku = 65;
        if (nilaiutsaku >= Nilaiku.nilaiUTS){
            Nilaiku.lulus = true;
            Nilaiku.ket = "C";
        }
        System.out.println("Nilai UTS ku= " + nilaiutsaku);
        System.out.println("Status Kelulusan= " + Nilaiku.lulus);
        System.out.println("Keterangan Kelulusan= " + Nilaiku.ket);
    }
}
```

2. Kontrol if..else

```
public class KontrolIfElse {
    int nilaiJava = 55;
    boolean lulus;
    String ket;
    public static void main(String[] args) {
        KontrolIfElse HasilUjian = new KontrolIfElse();
        /* HasilUjian = Obyek baru yang diciptakan dari class
KontrolIfElse */
```

```
        int nilaiJavaAku = 45;
        if (nilaiJavaAku >= HasilUjian.nilaiJava){
            HasilUjian.lulus = true;
            HasilUjian.ket = "Lulus";
        }
        else
        {
            HasilUjian.lulus = false;
            HasilUjian.ket = "Gagal";
        }

        System.out.println("Nilai Aku = " + nilaiJavaAku);
        System.out.println("Status     Kelulusan     =     "     +
HasilUjian.lulus);
        System.out.println("Keterangan    Kelulusan    =    "    +
HasilUjian.ket);
    }
}
```

3. Kontrol if..elseif

```
import javax.swing.*;
public class KontrolIfElseIf {
    public static void main(String[] args) {
        boolean lulus;
        String kriteria;
        String  MasukinNilai  =  JOptionPane.showInputDialog("Nilai
UTS?");
        int nilai = Integer.parseInt(MasukinNilai);
        if((nilai >= 50) && (nilai <= 65)){
            lulus = true;
            kriteria = "Lulus 'C'";
        }
        else
        if((nilai >= 66) && (nilai <= 80)){
            lulus = true;
            kriteria = "Lulus 'B'";
        }
        else
        if((nilai >= 81) && (nilai <= 100)){
            lulus = true;
            kriteria = "Lulus 'A'";
        }
        else{
            lulus = false;
            kriteria = "Gagal";
        }

        System.out.println("Nilai Aku = " + nilai);
        System.out.println("Status Kelulusan = " + lulus);
        System.out.println("Keterangan Kelulusan = " + kriteria);
        System.exit(0);
    }
}
```

4. Kontrol switch

```
import javax.swing.*;
public class KontrolSwitch {
    public static void main(String[] args) {
        String  kriteria  =  JOptionPane.showInputDialog("Silahkan
pilih kriteria (interval nili Anda):"
                + "\n1. nilai 50 s/d 64. \n2. nilai 65 s/d 84. \n3.
nilai 85 ke atas.");
        int pilihanku = Integer.parseInt(kriteria);
        switch (pilihanku){
            case 1: System.out.println("Lulus 'C'");
                break;
            case 2: System.out.println("Lulus 'B'");
                break;
            case 3: System.out.println("Lulus 'A'");
                break;
            default: System.out.println("Kriteria Salah Entry");
                break;
        }
        System.exit(0);
    }
}
```

5. Kontrol Ternary if..else

```
public class KontrolTernaryIfElse {
    public static void main(String[] args) {
        String MasukinNilai = JOptionPane.showInputDialog("Masukkan
nilai Anda: ");
        int Nilaiku = Integer.parseInt(MasukinNilai);
        String ket = (Nilaiku >= 55 ? "Lulus" : "Gagal");
        System.out.println("Nilai = " + Nilaiku);
        System.out.println("Anda " + ket);
        System.exit(0);
    }
}
```

6. Kontrol Iterasi “For” dengan Swing (GUI base)

```
import javax.swing.*;
public class InsFor {
    public static void main(String[] args) {
        int SS = 0;
        int A = 2;
        int F = 2;
        String   Bilangan   =   JOptionPane.showInputDialog("Angka
Deret?");
        int Bilang = Integer.parseInt(Bilangan);
        if (Bilang < 1){
            SS = 0;
        }
        else {
            if (Bilang == 1)
                SS = 1;
```

```
                else{
                    A = 2;
                    SS = 1;
                    F = 2;
                    for (int I = 2; I <= Bilang; ++I){
                        F = F * A;
                        SS = SS + (F - 1);
                    }
                }
            }
            System.out.println("Jumlah Deret = " + SS);
            System.exit(0);
        }

    }
```

7. Kontrol Iterasi “while”

```
import javax.swing.*;
public class InsWhile {
    public static void main(String[] args) {
        int SS = 0;
        int A = 2;
        int F = 2;
        int I = 2;
        String   Bilangan   =   JOptionPane.showInputDialog("Angka
Deret?");
        int Bilang = Integer.parseInt(Bilangan);
        if (Bilang < 1){
            SS = 0;
        }
        else {
            if (Bilang == 1)
                SS = 1;
            else{
                A = 2;
                SS = 1;
                F = 2;
                I = 2;
                while (I <= Bilang){
                    F = F * A;
                    SS = SS + (F-1);
                    ++I;
                }
            }
        }
        System.out.println("Jumlah Deret = " + SS);
        System.exit(0);
    }

}
```

8. Kontrol Iterasi “do..while” dengan Swing

```
import javax.swing.*;
public class InsDoWhi {
    public static void main(String[] args) {
        int SS = 0;
        int A = 2;
        int F = 2;
        int I = 2;
        String   Bilangan   =   JOptionPane.showInputDialog("Angka
Deret?");
        int Bilang = Integer.parseInt(Bilangan);
        if ( Bilang < 1){
            SS = 0;
        }
        else {
            if (Bilang == 1)
                SS = 1;
            else{
                A = 2;
                SS = 1;
                F = 2;
                I = 2;
                do {
                    F = F * A;
                    SS = SS + (F-1);
                    ++I;
                }
                while (I <= Bilang);
            }
        }

        System.out.println("Jumlah Deret = " + SS);
        System.exit(0);
    }
}
```

Selamat Mengerjakan ☺