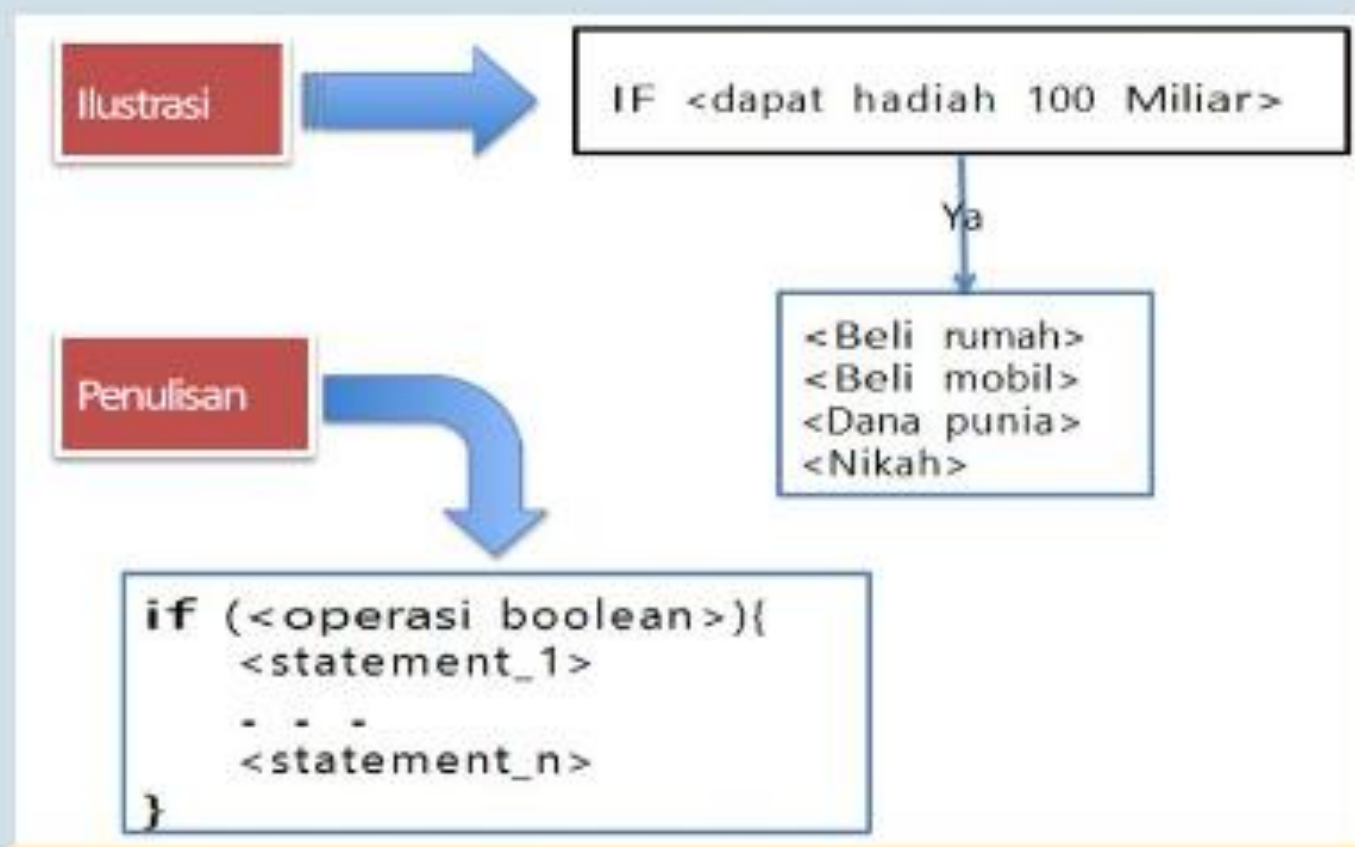
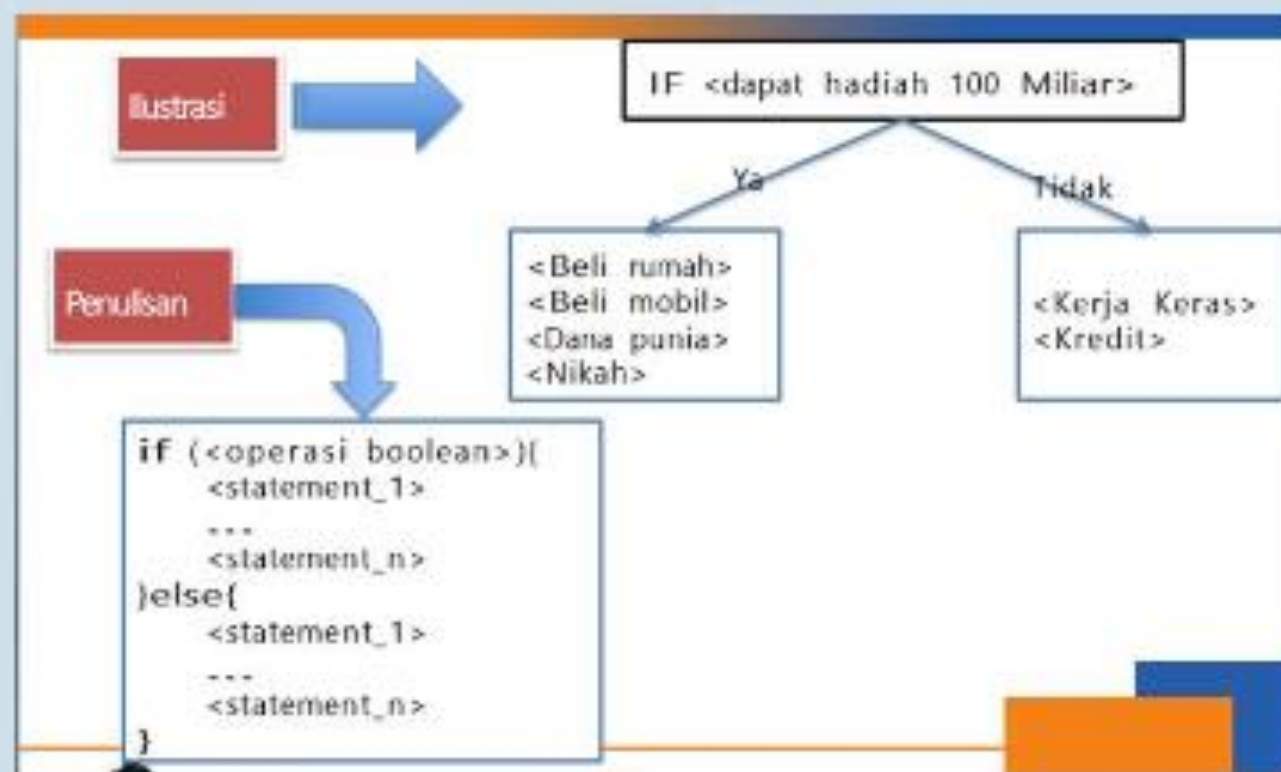


# Menerapkan Instruksi Pemilihan dan Pengulangan

# PERINTAH PENCABANGAN (KONTROL IF)



# KONTROL IF ELSE



## CONTOH KONTROL IF

```
1 import java.util.Scanner;
2 public class Lulus {
3     public static void main(String[] args) {
4         int nilai;
5         Scanner scanner = new Scanner(System.in);
6         System.out.print("Masukkan Nilai : ");
7         nilai = scanner.nextInt();
8         if(nilai >= 70)
9         {
10            System.out.println("Nilai saya = " + nilai);
11            System.out.println("Saya Lulus");
12        }
13    }
14 }
15
```

# CONTOH KONTROL IF ELSE

```
1 import java.util.Scanner;
2 public class Lulus2 {
3     public static void main(String[] args) {
4         int nilai;
5         Scanner scanner = new Scanner(System.in);
6         System.out.print("Masukkan Nilai : ");
7         nilai = scanner.nextInt();
8         if(nilai >= 70)
9         {
10            System.out.println("Nilai saya = " + nilai);
11            System.out.println("Saya Lulus");
12        }else{
13            System.out.println("Nilai saya = " + nilai);
14            System.out.println("Saya Tidak Lulus");
15            System.out.println("Hiks...");
16        }
17    }
18 }
19
```

## MULTI IF ELSE

Penulisan



```
if (<operasi_boolean_1>){  
    <statement_1>  
    ...  
    <statement_n>  
}else if (<operasi_boolean_2>){  
    <statement_1>  
    ...  
    <statement_n>  
}else if (<operasi_boolean_3>){  
    <statement_1>  
    ...  
    <statement_n>  
}else  
    <default_statement>  
}
```

## CONTOH MULTI IF ELSE

```
1 import java.util.Scanner;
2 public class AngkaToHuruf {
3     public static void main(String[] args) {
4         int angka;
5         Scanner scanner = new Scanner(System.in);
6         System.out.print("Masukkan Angka : ");
7         angka = scanner.nextInt();
8         if(angka==1){
9             System.out.println("Satu");
10        }else if(angka==2){
11            System.out.println("Dua");
12        }else if(angka==3){
13            System.out.println("Tiga");
14        }else if(angka==4){
15            System.out.println("Empat");
16        }else if(angka==5){
17            System.out.println("Lima");
18        }else if(angka==6){
19            System.out.println("Enam");
20        }else if(angka==7){
21            System.out.println("Tujuh");
22        }else if(angka==8){
23            System.out.println("Delapan");
24        }else{
25            System.out.println("Bukan Angka 1-8");
26        }
27    }
28 }
29 }
```

# SWITCH CASE

## Penulisan dan Contoh

```
switch (<ekspresi>){  
  case <nilai1> :  
    <statement_1>;  
    ...  
    <statement_n>;  
    break;  
  case <nilai2> :  
    <statement_1>;  
    ...  
    <statement_n>;  
    break;  
  case <nilai3> :  
    <statement_1>;  
    ...  
    <statement_n>;  
    break;  
  default :  
    <statement_1>;  
    ...  
    <statement_n>;  
    break;  
}
```



```
switch (nilai){  
  case 1 :  
    System.out.println("Nilai = 1");  
    break;  
  case 2 :  
    System.out.println("Nilai = 2");  
    break;  
  case 3 :  
    System.out.println("Nilai = 3");  
    break;  
  case 4 :  
    System.out.println("Nilai = 4");  
    break;  
  default :  
    System.out.println("Nilai bukan  
    1, 2, 3 atau 4");  
    break;  
}
```



## PERINTAH PENGULANGAN (WHILE DAN DO WHILE)

```
while (pernyataan)
{
    <statement_1>
    . . .
    <statement_n>
}
```

```
do
{
    <statement_1>
    . . .
    <statement_n>
}
while (pernyataan)
```

## CONTOH WHILE

```
1 public class CetakBilangan {
2     public static void main(String[] args) {
3         int i;
4         i=1;
5         while (i<=5)
6         {
7             System.out.println(i);
8             i++;
9         }
10    }
11 }
```

## CONTOH DO WHILE

```
1 import java.util.Scanner;
2 public class CetakBilangan3 {
3     public static void main(String[] args) {
4         Scanner scanner = new Scanner(System.in);
5         String input;
6         int i, stop;
7         System.out.print("Cetak sampai angka : ");
8         stop = scanner.nextInt();
9         i=1;
10        do
11        {
12            System.out.println(i);
13            i++;
14        }
15        while (i<=stop);
16    }
17 }
```

## PERULANGAN FOR

```
for (initialization; terminator; iteration)
{
    <statement_1>
    - - -
    <statement_n>
}
```

## CONTOH FOR

```
1 public class NestedLoop {  
2     public static void main(String[] args) {  
3         for (int i = 1; i <= 10; i++)  
4             {  
5                 for (int j = 1; j <= 10; j++)  
6                     {  
7                         System.out.print(j);  
8                     }  
9                 System.out.println();  
10            }  
11        }  
12    }
```