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## 1. Addition Listing

```
1 import java.util.Scanner;
2
3 public class addition2 {
4     public static void main (String args[])
5     {
6         Scanner input = new Scanner(System.in);
7
8         int number1;
9         int number2;
10        int sum;
11
12        System.out.print(s:"Masukkan angka pertama : ");
13        number1 = input.nextInt();
14        System.out.print(s:"Masukkan angka kedua : ");
15        number2 = input.nextInt();
16
17        sum = number1 + number2;
18
19        System.out.println("Jumlahnya : "+sum);
20    }
21 }
```

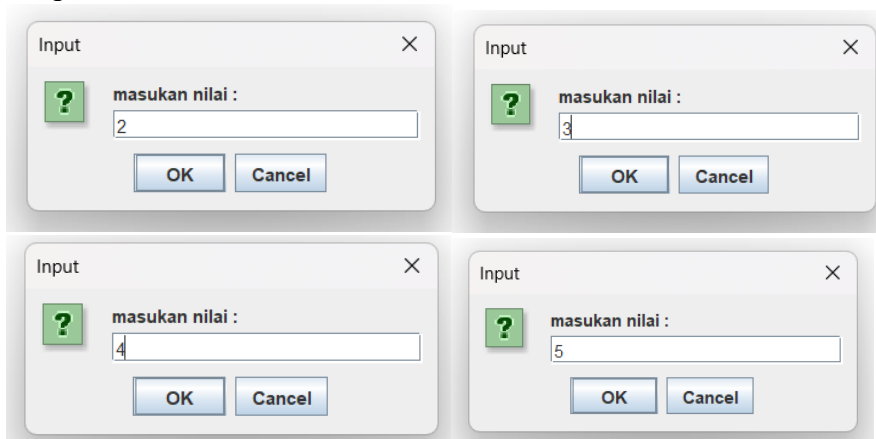
Output

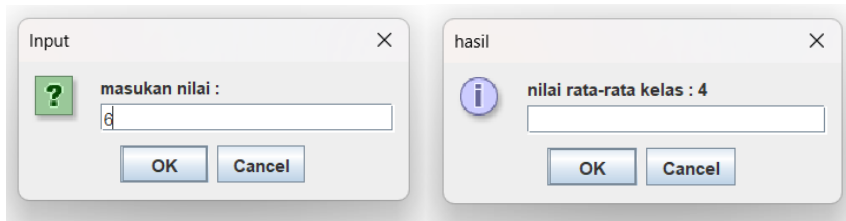
```
Masukkan angka pertama : 5
Masukkan angka kedua : 3
Jumlahnya : 8
```

## 2. Average1 Listing

```
1 import javax.swing.*;
2
3 public class Average1 {
4     public static void main(String[] args) {
5         int total;
6         int nilaiCounter;
7         int nilai;
8         int Average;
9         String nilaString;
10
11        total = 0;
12        nilaiCounter=1;
13
14        while (nilaiCounter<=5) {
15            nilaString = JOptionPane.showInputDialog(message:"masukan nilai : ");
16            nilai = Integer.parseInt(nilaString);
17            total = total + nilai;
18            nilaiCounter = nilaiCounter + 1;
19        }
20        Average = total / 5;
21        JOptionPane.showMessageDialog(parentComponent:null,"nilai rata-rata kelas : "+Average,title:"hasil",
22        JOptionPane.INFORMATION_MESSAGE);
23        System.exit(status:0);
24    }
```

Output





### 3. Average2

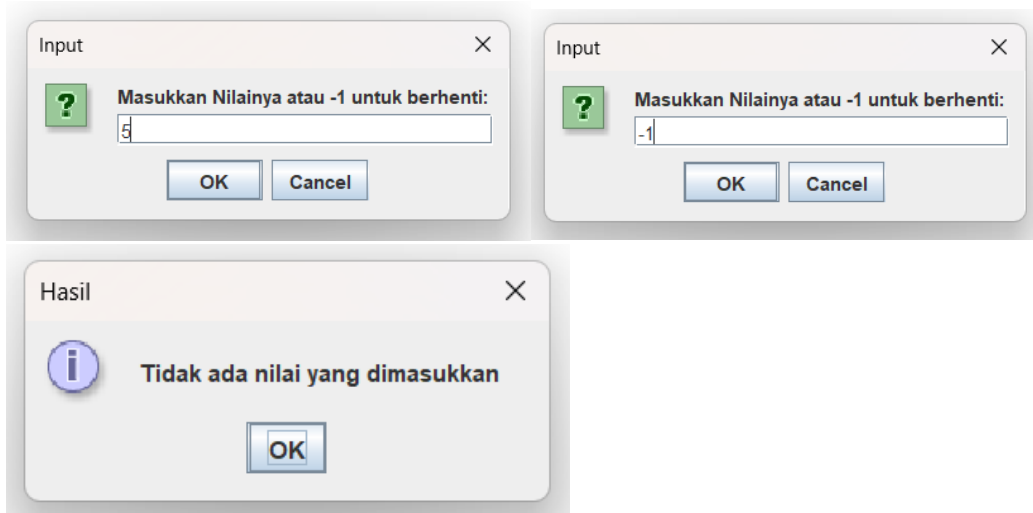
#### Listing

```

1  import javax.swing.*;
2
3  public class Average2 {
4      public static void main(String args[]) {
5          int total;
6          int nilaiCounter;
7          int nilai;
8          int average;
9          String nilaiString;
10
11         total = 0;
12         nilaiCounter = 0;
13
14         nilaiString = JOptionPane.showInputDialog(
15             message:"Masukkan Nilainya atau -1 untuk berhenti: ");
16         nilai = Integer.parseInt(nilaiString);
17
18         while (nilai != -1) {
19             total = total + nilai;
20             nilaiCounter = nilaiCounter + 1;
21
22             nilaiString = JOptionPane.showInputDialog(
23                 message:"Masukkan Nilainya atau -1 untuk berhenti: ");
24             nilai = Integer.parseInt(nilaiString);
25         }
26
27         if (nilaiCounter != 0) {
28             average = total / nilaiCounter;
29
30             JOptionPane.showMessageDialog(
31                 parentComponent:null,
32                 "Nilai Rata-rata Kelas: " + average,
33                 title:"Hasil",
34                 JOptionPane.INFORMATION_MESSAGE
35             );
36         } else {
37             JOptionPane.showMessageDialog(
38                 parentComponent:null,
39                 message:"Tidak ada nilai yang dimasukkan",
40                 title:"Hasil",
41                 JOptionPane.INFORMATION_MESSAGE
42             );
43         }
44
45         System.exit(status:0);
46     }
47 }
48

```

#### Output

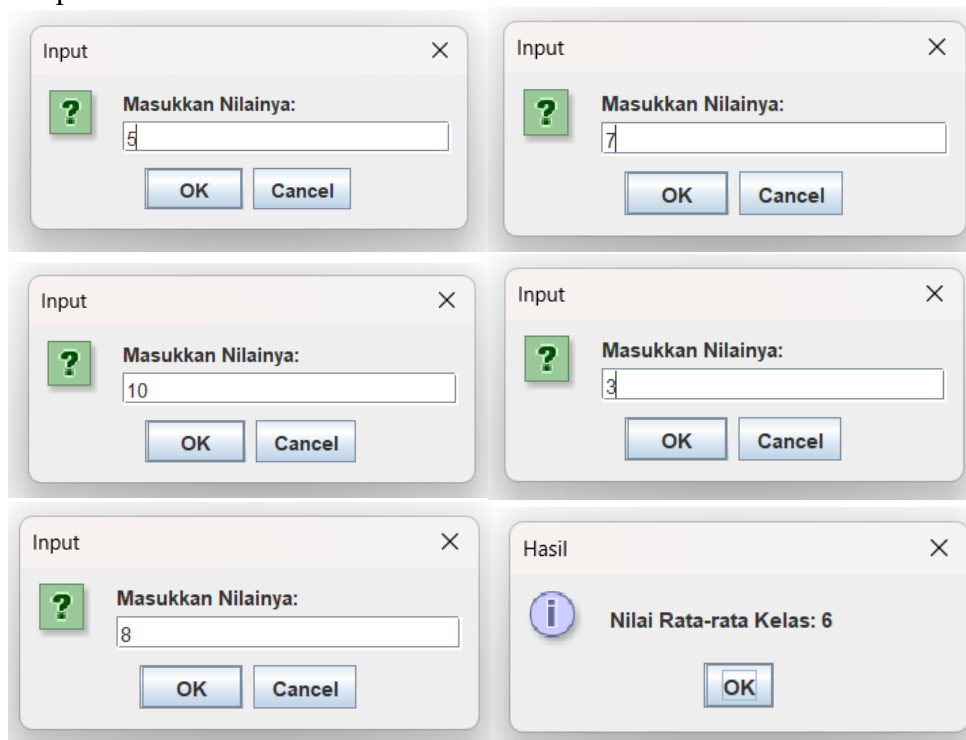


## 4. Average3

### Listing

```
1 import javax.swing.*;
2
3 public class average3 {
4     Run | Debug | Run main | Debug main
5     public static void main(String args[]) {
6         int total;
7         int nilaiCounter;
8         int nilai;
9         int average;
10        String nilaiString;
11
12        total = 0;
13
14        for (nilaiCounter = 1; nilaiCounter ≤ 5; nilaiCounter++) {
15            // Meminta input nilai dari user
16            nilaiString = JOptionPane.showInputDialog(message:"Masukkan Nilainya: ");
17            // nilaiString masih dalam bentuk String
18            nilai = Integer.parseInt(nilaiString);
19            // Mengubah String ke integer menggunakan Integer.parseInt (dari java.lang)
20
21            total = total + nilai;
22        }
23
24        average = total / 5;
25
26        JOptionPane.showMessageDialog(
27            parentComponent:null,
28            "Nilai Rata-rata Kelas: " + average,
29            title:"Hasil",
30            JOptionPane.INFORMATION_MESSAGE
31        );
32
33        System.exit(status:0);
34    }
35 } // Akhir dari class Average3
```

### Output



## 5. IF1

### Listing

```
1 public class If1 {
2     Run | Debug | Run main | Debug main
3     public static void main(String args[])
4     {
5         int nilai= 50;
6         if (nilai ≥ 60)
7             System.out.println(x:"Lulus");
8             System.out.println(x:"Terima kasih");
9     }
10 }
```

## Output

```
azza\Documents\Gunadarma\AP2\AP2A\MATKUL\rabu-16-4-25> & 'C:\Program Files\Java\jdk-21\bin\java.exe'
8ac4a95ce8b86da144a2b5\redhat.java\jdt_ws\rabu-16-4-25_c47bd492\bin' 'If1'
Terima kasih
PS C:\Users\Sheva Meazza\Documents\Gunadarma\AP2\AP2A\MATKUL\rabu-16-4-25>
```

## 6. IF2

### Listing

```
1 public class If2 {
    Run | Debug | Run main | Debug main
2     public static void main(String[] args) {
3         int nilai1 = 50;
4         int nilai2 = 75;
5         if (nilai1 == nilai2)
6             System.out.println(nilai1+" = "+nilai2);
7         if (nilai1 >= nilai2)
8             System.out.println(nilai1+" >= "+nilai2);
9         if (nilai1 <= nilai2)
10            System.out.println(nilai1+" <= "+nilai2);
11        if (nilai1 != nilai2)
12            System.out.println(nilai1+" != "+nilai2);
13    }
14 }
```

### Output

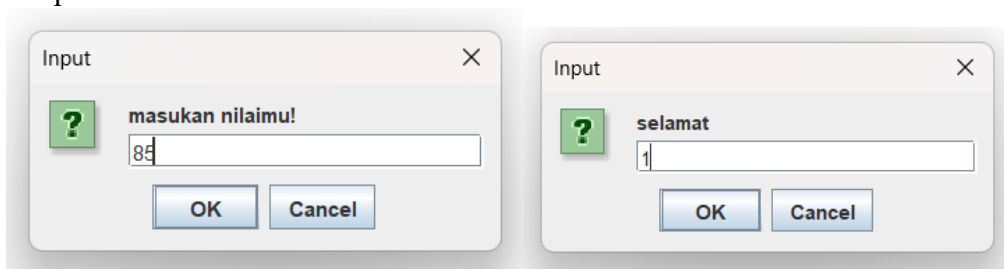
```
PS C:\Users\Sheva Meazza\Documents\Gunadarma\AP2\AP2A\MATKUL\rabu-16-4-25>
ceStorage\3a7c7a8bd48ac4a95ce8b86da144a2b5\redhat.java\jdt_ws\rabu-16-4-25_
50 <= 75
50 != 75
PS C:\Users\Sheva Meazza\Documents\Gunadarma\AP2\AP2A\MATKUL\rabu-16-4-25>
```

## 7. IF3

### Listing

```
1 import javax.swing.*;
2
3 public class If11 {
    Run | Debug | Run main | Debug main
4     public static void main(String[] args) {
5         String a = JOptionPane.showInputDialog(message:"masukan nilaimu!");
6         int nilai = Integer.parseInt(a);
7
8         JOptionPane.showInputDialog(parentComponent:null, nilai>60?"selamat":"hasi;",
9         JOptionPane.INFORMATION_MESSAGE);
10        System.exit(status:0);
11    }
12 }
```

### Output

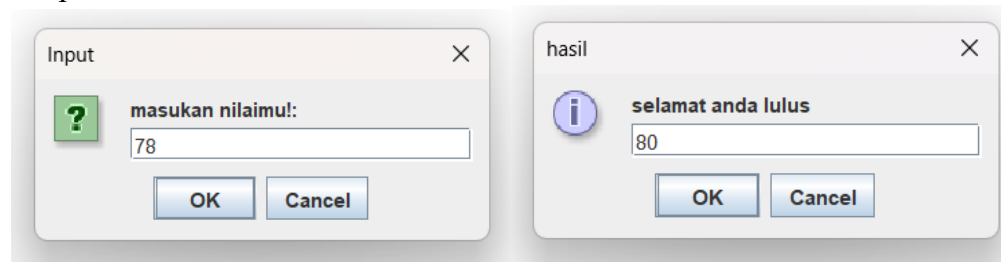


## 8. IF4

### Listing

```
1 import javax.swing.*;
2
3 public class If22 {
4     public static void main(String[] args) {
5         String a = JOptionPane.showInputDialog(message:"masukan nilaimu! ");
6         int nilai = Integer.parseInt(a);
7         if(nilai>60)
8         {
9             JOptionPane.showInputDialog(parentComponent:null, message:"selamat anda lulus", title:"hasil",
10             JOptionPane.INFORMATION_MESSAGE);
11         }
12         else
13         {
14             JOptionPane.showInputDialog(parentComponent:null, message:"maaf anda belum beruntung", title:"hasil",
15             JOptionPane.INFORMATION_MESSAGE);
16         }
17         System.exit(status:0);
18     }
19 }
20 }
```

### Output



## 9. IF5

### Listing

```
1 public class If33 {
2     public static void main(String[] args) {
3         int nilai = 90;
4         if (nilai ≥ 90)
5             System.out.println(x:"grade : A");
6         else if (nilai ≥ 80)
7             System.out.println(x:"grade : B");
8         else if (nilai ≥ 70)
9             System.out.println(x:"grade : C");
10        else if (nilai ≥ 60)
11            System.out.println(x:"grade : D");
12        else if (nilai ≥ 50)
13            System.out.println(x:"grade : D");
14    }
15 }
```

### Output

```
PS C:\Users\Sheva Meazza\Documents\Gunadarma\AP2\AP2A\MATKUL\rabu-16-4-25>
ceStorage\3a7c7a8bd48ac4a95ce8b86da144a2b5\redhat.java\jdt_ws\rabu-16-4-25_
grade : A
PS C:\Users\Sheva Meazza\Documents\Gunadarma\AP2\AP2A\MATKUL\rabu-16-4-25>
```

## 10. IF6

### Listing

```
1 public class If333 {
2     public static void main(String[] args) {
3         int nilai = 81;
4         System.out.println(nilai ≥ 90?"Grade : A "
5         :(nilai ≥ 80?"Grade : B"
6         :(nilai ≥ 70?"Grade : C"
7         :(nilai ≥ 60?"Grade : D"
8         : "Grade : E"))));
9     }
10 }
```

## Output

```
PS C:\Users\Sheva Meazza\Documents\Gunadarma\AP2\AP2A\MATKUL\rabu-16-4-25>
ceStorage\3a7c7a8bd48ac4a95ce8b86da144a2b5\redhat.java\jdt_ws\rabu-16-4-25_
Grade : B
PS C:\Users\Sheva Meazza\Documents\Gunadarma\AP2\AP2A\MATKUL\rabu-16-4-25>
```

## 11. Input1

### Listing

```
1  import java.io.*;
2
3  public class input {
    Run | Debug | Run main | Debug main
4      public static void main(String[] args) {
5          try {
6              String nama;
7              System.out.println("masukan nama anda : ");
8              BufferedReader tulis = new BufferedReader(new InputStreamReader(System.in));
9              nama = tulis.readLine();
10             System.out.println("nama anda adalah : " + nama);
11         } catch (IOException ie){
12             System.out.println(ie.getMessage());
13         }
14     }
15 }
```

### Output

```
PS C:\Users\Sheva Meazza\Documents\Gunadarma\AP2\AP2A\MATKUL\rabu-16-4-25> &
ceStorage\3a7c7a8bd48ac4a95ce8b86da144a2b5\redhat.java\jdt_ws\rabu-16-4-25_c47
masukan nama anda :
Sheva Meazza
nama anda adalah : Sheva Meazza
PS C:\Users\Sheva Meazza\Documents\Gunadarma\AP2\AP2A\MATKUL\rabu-16-4-25> █
```

## 12. Input2

### Listing

```
1  import java.io.*;
2
3  public class input2 {
    Run | Debug | Run main | Debug main
4      public static void main(String[] args) throws IOException {
5
6          System.out.println("input bilangan : ");
7          DataInputStream masukan = (new DataInputStream(System.in));
8          int bilangan = Integer.parseInt(masukan.readLine());
9          System.out.println("bilangan yang ada dimasukan : " + bilangan);
10     }
11 }
```

### Output

```
PS C:\Users\Sheva Meazza\Documents\Gunadarma\AP2\AP2A\MATKUL\rabu-16-4-25> &
ceStorage\3a7c7a8bd48ac4a95ce8b86da144a2b5\redhat.java\jdt_ws\rabu-16-4-25_c47
input bilangan :
9
bilangan yang ada dimasukan : 9
PS C:\Users\Sheva Meazza\Documents\Gunadarma\AP2\AP2A\MATKUL\rabu-16-4-25> █
```

## 13. Input3

### Listing

```
1  import javax.swing.*;
2
3  public class input3 {
    Run | Debug | Run main | Debug main
4      public static void main(String[] args) {
5
6          String nama;
7          nama = JOptionPane.showInputDialog(message:"masukan nama : ");
8          System.out.println("nama anda : " + nama);
9          JOptionPane.showMessageDialog(parentComponent:null,"nama anda : " + nama);
10         System.exit(status:0);
11     }
12 }
```

## Output

```
PS C:\Users\Sheva Meazza\Documents\Gunadarma\AP2\AP2A\MATKUL\rabu-16-4-25> &
ceStorage\3a7c7a8bd48ac4a95ce8b86da144a2b5\redhat.java\jdt_ws\rabu-16-4-25_c47
input bilangan :
9
bilangan yang ada dimasukan : 9
PS C:\Users\Sheva Meazza\Documents\Gunadarma\AP2\AP2A\MATKUL\rabu-16-4-25> █
```

## 14. Aritmatika

### Listing

```
1 public class Arimatika {
    Run | Debug | Run main | Debug main
2     public static void main(String[] args) {
3         int x;
4         int y;
5         x = 15;
6         y = 4;
7         System.out.println("nilai x+y : " + x+y);
8         System.out.println("nilai x+y : " + (x-y));
9         System.out.println("nilai x/y : " + (x/y));
10        System.out.println("nilai x/y : " +(x*y));
11    }
12 }
```

### Output

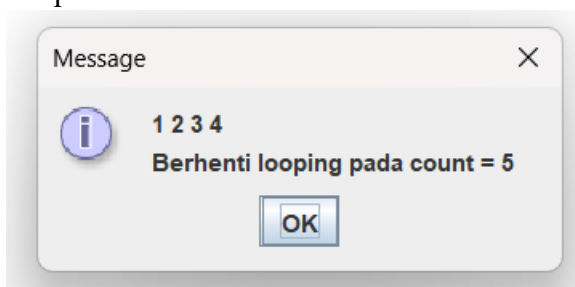
```
PS C:\Users\Sheva Meazza\Documents\Gunadarma\AP2\AP2A\MATKUL\rabu-16-4-25> &
ceStorage\3a7c7a8bd48ac4a95ce8b86da144a2b5\redhat.java\jdt_ws\rabu-16-4-25_c47
nilai x+y : 154
nilai x+y : 11
nilai x/y : 3
nilai x/y : 60
PS C:\Users\Sheva Meazza\Documents\Gunadarma\AP2\AP2A\MATKUL\rabu-16-4-25>
```

## 15. Breaktest

### Listing

```
1 import javax.swing.JOptionPane;
2
3 ~ public class Breaktest {
    Run | Debug | Run main | Debug main
4 ~     public static void main(String args[]) {
5         String output = "";
6         int count;
7
8 ~         for (count = 1; count ≤ 10; count++) {
9             if (count == 5)
10                break;
11            output = output + count + " ";
12        }
13        output += "\nBerhenti looping pada count = " + count;
14        JOptionPane.showMessageDialog(parentComponent:null, output);
15        System.exit(status:0);
16    }
17 }
```

### Output

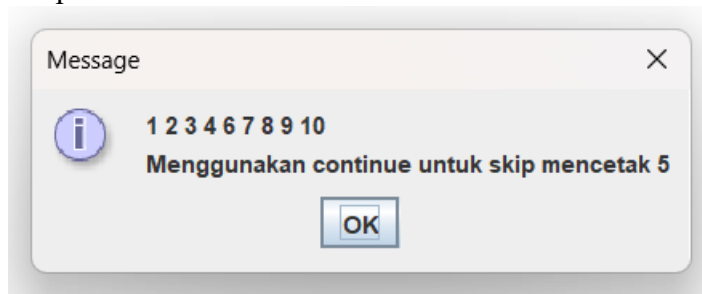


## 16. ContinueTest

### Listing

```
1 import javax.swing.JOptionPane;
2
3 public class ContinueTest {
4     public static void main(String args[]) {
5         String output = "";
6         int count;
7
8         for (count = 1; count ≤ 10; count++) {
9             if (count == 5)
10                continue;
11             output = output + count + " ";
12         }
13
14         output += "\nMenggunakan continue untuk skip mencetak 5";
15         JOptionPane.showMessageDialog(parentComponent:null, output);
16         System.exit(status:0);
17     }
18 }
19
20 }
```

### Output



## 17. Increment

### Listing

```
1 public class increment {
2     public static void main(String[] args) {
3         int a = 4;
4         System.out.println(x:"nilai a adalah 4");
5
6         System.out.println("nilai a menjadi = "+ (a++));
7         System.out.println("nilai a menjadi = "+ (++a));
8
9         System.out.println();
10        System.out.println("nilai a menjadi = "+ (a--));
11        System.out.println("nilai a menjadi = "+ (--a));
12    }
13 }
```

### Output

```
PS C:\Users\Sheva Meazza\Documents\Gunadarma\AP2\AP2A\MATKUL\rabu-16-4-25> &
ceStorage\3a7c7a8bd48ac4a95ce8b86da144a2b5\redhat.java\jdt_ws\rabu-16-4-25_c47
nilai a adalah 4
nilai a menjadi = 4
nilai a menjadi = 6

nilai a menjadi = 6
nilai a menjadi = 4
PS C:\Users\Sheva Meazza\Documents\Gunadarma\AP2\AP2A\MATKUL\rabu-16-4-25>
```

## 18. Modulus

### Listing

```
1 public class modulus {
2     public static void main(String[] args) {
3         int bilangan = 25;
4         System.out.println("hasil "+bilangan+" % 4 = "+(bilangan % 4));
5         System.out.println("hasil "+bilangan+" % 9 = "+(bilangan % 9));
6         System.out.println("hasil "+bilangan+" % 13 = "+(bilangan % 13));
7         System.out.println("hasil "+bilangan+" % 40 = "+(bilangan % 40));
8     }
9 }
10 }
```



## Output

```
PS C:\Users\Sheva Meazza\Documents\Gunadarma\AP2\AP2A\MATKUL\rabu-16-4-25> &
ceStorage\3a7c7a8bd48ac4a95ce8b86da144a2b5\redhat.java\jdt_ws\rabu-16-4-25_c47
hasil 25 % 4 = 1
hasil 25 % 9 = 7
hasil 25 % 13 = 12
hasil 25 % 40 = 25
PS C:\Users\Sheva Meazza\Documents\Gunadarma\AP2\AP2A\MATKUL\rabu-16-4-25>
```

## 19. Relasi

### Listing

```
1 public class Relasi {
    Run | Debug | Run main | Debug main
2     public static void main(String[] args) {
3         int A = 10;
4         int B = 4;
5         System.out.println(x:"Operator Logika");
6         System.out.println("A > B = " + (A > B));
7         System.out.println("A < B = " + (A < B));
8         System.out.println("A = B = " + (A == B));
9         System.out.println("A ≠ B = " + (A≠B));
10    }
11 }
```

## Output

```
PS C:\Users\Sheva Meazza\Documents\Gunadarma\AP2\AP2A\MATKUL\rabu-16-4-25> &
ceStorage\3a7c7a8bd48ac4a95ce8b86da144a2b5\redhat.java\jdt_ws\rabu-16-4-25_c47
Operator Logika
A > B = true
A < B = false
A = B = false
A != B= true
PS C:\Users\Sheva Meazza\Documents\Gunadarma\AP2\AP2A\MATKUL\rabu-16-4-25>
```

## 20. Switch1

### Listing

```
1 public interface switch1 {
    Run | Debug | Run main | Debug main
2     public static void main(String[] args) {
3         int nilai = 2;
4         switch (nilai) {
5             case 1: System.out.println(x:"satu"); break;
6             case 2: System.out.println(x:"dua"); break;
7             case 3: System.out.println(x:"tiga"); break;
8             default: System.out.println(x:"tidak ada dalam pilihan");
9         }
10    }
11 }
```

## Output

```
PS C:\Users\Sheva Meazza\Documents\Gunadarma\AP2\AP2A\MATKUL\rabu-16-4-25>
ceStorage\3a7c7a8bd48ac4a95ce8b86da144a2b5\redhat.java\jdt_ws\rabu-16-4-25_
dua
PS C:\Users\Sheva Meazza\Documents\Gunadarma\AP2\AP2A\MATKUL\rabu-16-4-25>
```

## 21. Variable

### Listing

```
1 public class Variable{
    Run | Debug | Run main | Debug main
2     public static void main(String args[]) {
3         System.err.println(x:"\nContoh penggunaan variable\n");
4         int nilai = 12;
5         char karakter = 'b';
6         String tulisan = "I Love Java!!!";
7         double pecahan = 123.456;
8         float pecah = 14.353f;
9
10        System.out.println("variable int =" + nilai);
11        System.out.println("variable char =" + karakter);
12        System.out.println("variable string =" + tulisan);
13        System.out.println("variable float =" + pecah);
14        System.out.println("variable double =" + pecahan);
15    }
16 }
```

### Output

```
PROBLEMS 3 OUTPUT DEBUG CONSOLE TERMINAL PORTS

PS C:\Users\Sheva Meazza\Documents\Gunadarma\AP2\AP2A\MATKUL\rabu-16-4-25> &
ceStorage\3a7c7a8bd48ac4a95ce8b86da144a2b5\redhat.java\jdt_ws\rabu-16-4-25_c4'

Contoh penggunaan variable

variable int =12
variable char =b
variable string =I Love Java!!!
variable float =14.353
variable double =123.456
PS C:\Users\Sheva Meazza\Documents\Gunadarma\AP2\AP2A\MATKUL\rabu-16-4-25>
```

## 22. Welcom1

### Listing

```
1 public class welcom1{
2
    Run | Debug | Run main | Debug main
3     public static void main(String[] args) {
4         {
5             System.err.println(x:"welcome to java programing!!!");
6         }
7     }
8 }
```

### Output

```
PS C:\Users\Sheva Meazza\Documents\Gunadarma\AP2\AP2A\MATKUL\rabu-16-4-25>
ceStorage\3a7c7a8bd48ac4a95ce8b86da144a2b5\redhat.java\jdt_ws\rabu-16-4-25_
welcome to java programing!!!
PS C:\Users\Sheva Meazza\Documents\Gunadarma\AP2\AP2A\MATKUL\rabu-16-4-25>
```