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<table>
<tr><th>No</th><th>Pseudocode</th><th>Java Code</th></tr>
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```
Program Login
Kamus
    userPass, userId, inputUserId, inputUserPass : string
    userAttempt : integer
Algoritma
    userPass <- “admin”
    userId <- “admin”
    input( inputUserId, inputUserPass )

    WHILE ( true ) DO
        IF ( inputUserId == userId && inputUserPass== userPass ) THEN
            output( userAttempt )
            output( “login berhasil” )
            break
        END IF

        userAttempt += 1
    END WHILE

Endprogram
```

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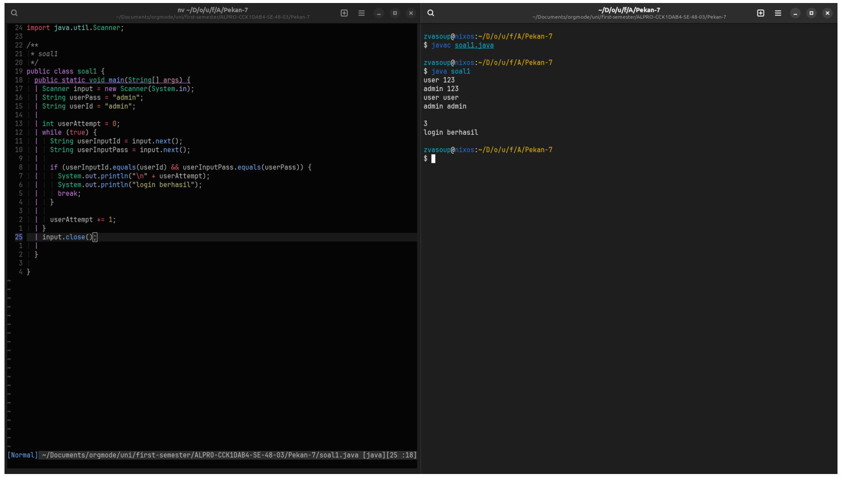
nv ~/D/o/u/f/A/Pekan-7
~/Documents/orgmode/uni/first-semester/ALPRO-CCK1DAB4-SE-48-03/Pekan-7
~/D/o/u/f/A/Pekan-7
~/Documents/orgmode/uni/first-semester/ALPRO-CCK1DAB4-SE-48-03/Pekan-7
[Normal] ~/Documents/orgmode/uni/first-semester/ALPRO-CCK1DAB4-SE-48-03/Pekan-7/soal1.java [java][25 :18]

```java
import java.util.Scanner;

/**
 * soal1
 */
public class soal1 {
  public static void main(String[] args) {
    Scanner input = new Scanner(System.in);
    String userPass = "admin";
    String userId = "admin";

    int userAttempt = 0;
    while (true) {
      String userInputId = input.next();
      String userInputPass = input.next();

      if (userInputId.equals(userId) && userInputPass.equals(userPass)) {
        System.out.println("\n" + userAttempt);
        System.out.println("login berhasil");
        break;
      }

      userAttempt += 1;
    }
    input.close();

  }

}
```

```
zvasoup@nixos:~/D/o/u/f/A/Pekan-7
$ javac soal1.java

zvasoup@nixos:~/D/o/u/f/A/Pekan-7
$ java soal1
user 123
admin 123
user user
admin admin

3
login berhasil

zvasoup@nixos:~/D/o/u/f/A/Pekan-7
$
```

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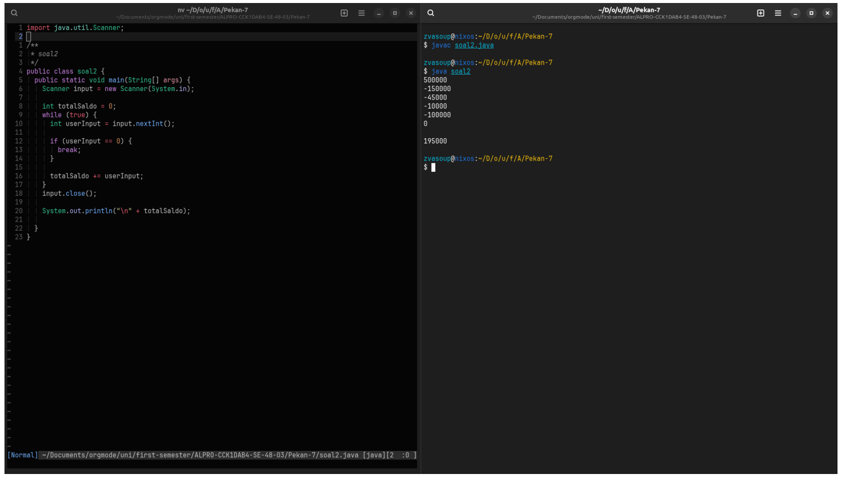
2

```
Program Pengeluaran
Kamus
    totalSaldo, userInput : integer
Algoritma
    totalSaldo <- 0
    WHILE ( true ) DO
        input( userInput )
        IF ( userInput == 0 ) THEN
            break
        END IF
        totalSaldo += userInput
    END WHILE

    output( totalSaldo )
Endprogram
```


nv ~/D/o/u/f/A/Pekan-7
~/Documents/orgmode/uni/first-semester/ALPRO-CCK1DAB4-SE-48-03/Pekan-7
~/D/o/u/f/A/Pekan-7
~/Documents/orgmode/uni/first-semester/ALPRO-CCK1DAB4-SE-48-03/Pekan-7

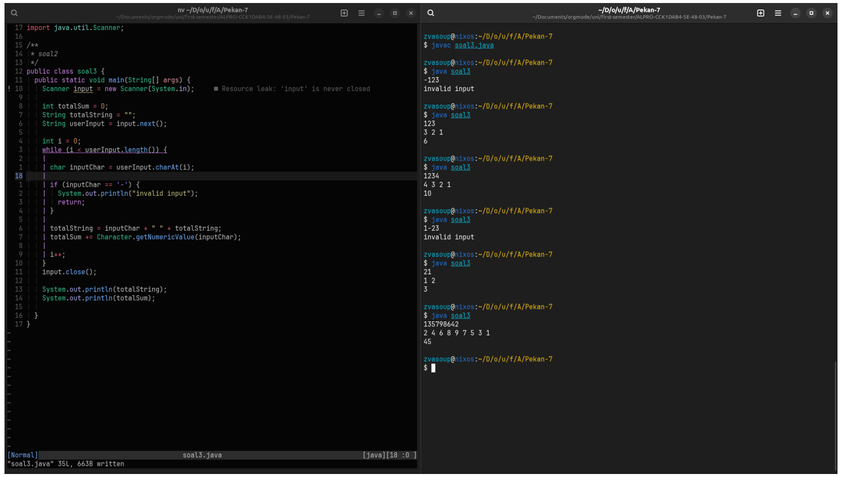
```java
import java.util.Scanner;

/**
 * soal2
 */
public class soal2 {
  public static void main(String[] args) {
    Scanner input = new Scanner(System.in);

    int totalSaldo = 0;
    while (true) {
      int userInput = input.nextInt();

      if (userInput == 0) {
        break;
      }

      totalSaldo += userInput;
    }
    input.close();

    System.out.println("\n" + totalSaldo);

  }
}
```

```
[Normal] ~/Documents/orgmode/uni/first-semester/ALPRO-CCK1DAB4-SE-48-03/Pekan-7/soal2.java [java][2  :0 ]
```

```
zvasoup@nixos:~/D/o/u/f/A/Pekan-7
$ javac soal2.java

zvasoup@nixos:~/D/o/u/f/A/Pekan-7
$ java soal2
500000
-150000
-45000
-10000
-100000
0

195000

zvasoup@nixos:~/D/o/u/f/A/Pekan-7
$ 
```

3

```
Program Digit
Kamus
        totalSum, i: integer
        totalString, userInput : string
        inputChar : character
Algoritma
        totalSum <- 0
        totalString <- “”
        input( userInput)
        i <- 1

        WHILE ( i <= userInput.length() ) DO
                inputChar <- userInput.charAt( i )

                IF ( inputChar == ‘-‘ ) THEN
                        output( “Invalid input” )
                        return
                END IF

                totalString <- inputChar + “ “ + totalString
                totalSum += Character.getNumericValue( inputChar )

                i++
        END WHILE

        output( totalString )
        output( totalSum )

Endprogram
```

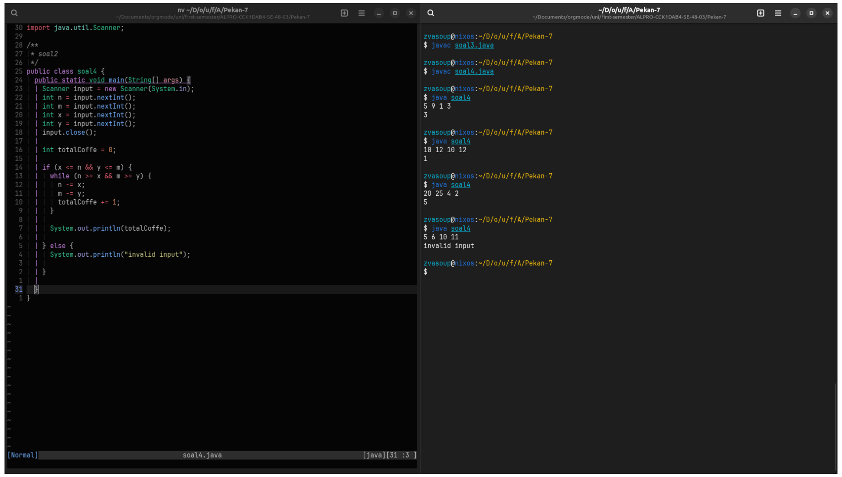

nv ~/D/o/u/f/A/Pekan-7
~/Documents/orgmode/uni/first-semester/ALPRO-CCK1DAB4-SE-48-03/Pekan-7
~/D/o/u/f/A/Pekan-7
~/Documents/orgmode/uni/first-semester/ALPRO-CCK1DAB4-SE-48-03/Pekan-7

```
import java.util.Scanner;

/**
 * soal2
 */
public class soal3 {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);     ■ Resource leak: 'input' is never closed

        int totalSum = 0;
        String totalString = "";
        String userInput = input.next();

        int i = 0;
        while (i < userInput.length()) {

            char inputChar = userInput.charAt(i);

            if (inputChar == '-') {
                System.out.println("invalid input");
                return;
            }

            totalString = inputChar + " " + totalString;
            totalSum += Character.getNumericValue(inputChar);

            i++;
        }
        input.close();

        System.out.println(totalString);
        System.out.println(totalSum);

    }
}
[Normal]                    soal3.java                    [java][18 :0 ]
"soal3.java" 35L, 663B written
```

```
zvasoup@nixos:~/D/o/u/f/A/Pekan-7
$ javac soal3.java

zvasoup@nixos:~/D/o/u/f/A/Pekan-7
$ java soal3
-123
invalid input

zvasoup@nixos:~/D/o/u/f/A/Pekan-7
$ java soal3
123
3 2 1
6

zvasoup@nixos:~/D/o/u/f/A/Pekan-7
$ java soal3
1234
4 3 2 1
10

zvasoup@nixos:~/D/o/u/f/A/Pekan-7
$ java soal3
1-23
invalid input

zvasoup@nixos:~/D/o/u/f/A/Pekan-7
$ java soal3
21
1 2
3

zvasoup@nixos:~/D/o/u/f/A/Pekan-7
$ java soal3
135798642
2 4 6 8 9 7 5 3 1
45

zvasoup@nixos:~/D/o/u/f/A/Pekan-7
$
```

4

```
Program Cangkir Kopi
Kamus
        n, m, x, y, i, totalCoffee  : integer
Algoritma
        input( n, m, x, y )
        totalCoffee <- 0

        IF ( x <= n && y <= m ) THEN
                WHILE ( n >= x && m >= y ) DO
                        n -= x
                        m -= y
                        totalCoffee += 1
                END WHILE

                output( totalCoffee )
        ELSE
                output( “Invalid Input” )
        END IF

Endprogram
```


nv ~/D/o/u/f/A/Pekan-7
~/Documents/orgmode/uni/first-semester/ALPRO-CCK1DAB4-SE-48-03/Pekan-7
~/D/o/u/f/A/Pekan-7
~/Documents/orgmode/uni/first-semester/ALPRO-CCK1DAB4-SE-48-03/Pekan-7

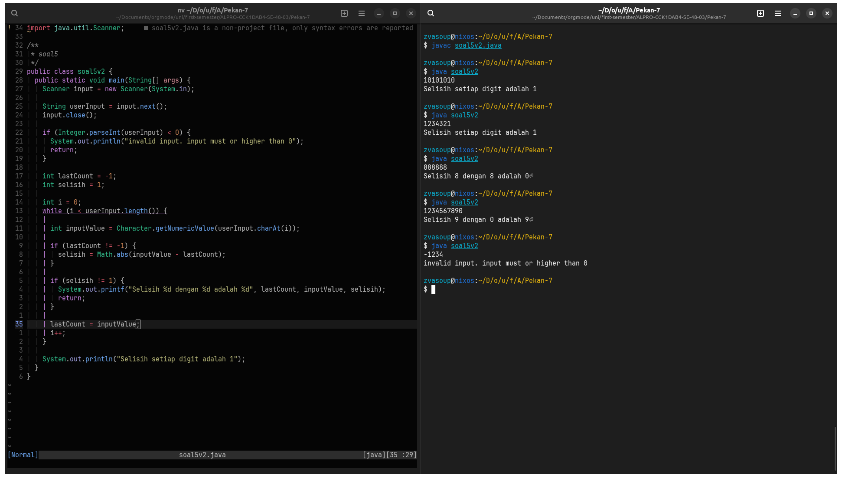
```java
import java.util.Scanner;

/**
 * soal2
 */
public class soal4 {
  public static void main(String[] args) {
    Scanner input = new Scanner(System.in);
    int n = input.nextInt();
    int m = input.nextInt();
    int x = input.nextInt();
    int y = input.nextInt();
    input.close();

    int totalCoffe = 0;

    if (x <= n && y <= m) {
      while (n >= x && m >= y) {
        n -= x;
        m -= y;
        totalCoffe += 1;
      }

      System.out.println(totalCoffe);

    } else {
      System.out.println("invalid input");

    }

  }
}
```

```
[Normal]                    soal4.java                    [java][31 :3 ]
```

```
zvasoup@nixos:~/D/o/u/f/A/Pekan-7
$ javac soal3.java

zvasoup@nixos:~/D/o/u/f/A/Pekan-7
$ javac soal4.java

zvasoup@nixos:~/D/o/u/f/A/Pekan-7
$ java soal4
5 9 1 3
3

zvasoup@nixos:~/D/o/u/f/A/Pekan-7
$ java soal4
10 12 10 12
1

zvasoup@nixos:~/D/o/u/f/A/Pekan-7
$ java soal4
20 25 4 2
5

zvasoup@nixos:~/D/o/u/f/A/Pekan-7
$ java soal4
5 6 10 11
invalid input

zvasoup@nixos:~/D/o/u/f/A/Pekan-7
$
```

5

```
Program Konsekutif
Kamus
        userInput : string
        lastCount, inputValue, selisih, i  : integer
Algoritma
        input( userInput )
        IF ( Integer.parseInt( userInput < 0 ) THEN
                output( “Invalid input’ )
                return
        END IF

        lastCount <- -1
        selisih <- 1
        i <- 1
        WHILE ( i <= userInput.length() ) DO
        inputValue <- Character.getNumbericValue( userInput.charAt( i ) )

        IF ( lastCount != -1 ) THEN
                selisih <- Math.abs( inputValue – lastCount )
        END IF

        IF ( selisih != 1 ) THEN
                output( “Selisih “, lastCount, “ dengan “, inputValue, “ adalah “, selisih” )
                return
        END IF

        lastCount <- inputValue
        i++
        END WHILE

        output ( “Selisih setiap digit adalah 1” )

Endprogram
```


nv ~/D/o/u/f/A/Pekan-7
~/Documents/orgmode/uni/first-semester/ALPRO-CCK1DAB4-SE-48-03/Pekan-7
~/D/o/u/f/A/Pekan-7
~/Documents/orgmode/uni/first-semester/ALPRO-CCK1DAB4-SE-48-03/Pekan-7

```java
import java.util.Scanner;     ■ soal5v2.java is a non-project file, only syntax errors are reported

/**
 * soal5
 */
public class soal5v2 {
  public static void main(String[] args) {
    Scanner input = new Scanner(System.in);

    String userInput = input.next();
    input.close();

    if (Integer.parseInt(userInput) < 0) {
      System.out.println("invalid input. input must or higher than 0");
      return;
    }

    int lastCount = -1;
    int selisih = 1;

    int i = 0;
    while (i < userInput.length()) {

      int inputValue = Character.getNumericValue(userInput.charAt(i));

      if (lastCount != -1) {
        selisih = Math.abs(inputValue - lastCount);
      }

      if (selisih != 1) {
        System.out.printf("Selisih %d dengan %d adalah %d", lastCount, inputValue, selisih);
        return;
      }

      lastCount = inputValue;
      i++;
    }

    System.out.println("Selisih setiap digit adalah 1");
  }
}
[Normal]                    soal5v2.java                    [java][35 :29]
```

```
zvasoup@nixos:~/D/o/u/f/A/Pekan-7
$ javac soal5v2.java

zvasoup@nixos:~/D/o/u/f/A/Pekan-7
$ java soal5v2
10101010
Selisih setiap digit adalah 1

zvasoup@nixos:~/D/o/u/f/A/Pekan-7
$ java soal5v2
1234321
Selisih setiap digit adalah 1

zvasoup@nixos:~/D/o/u/f/A/Pekan-7
$ java soal5v2
888888
Selisih 8 dengan 8 adalah 0⏎

zvasoup@nixos:~/D/o/u/f/A/Pekan-7
$ java soal5v2
1234567890
Selisih 9 dengan 0 adalah 9⏎

zvasoup@nixos:~/D/o/u/f/A/Pekan-7
$ java soal5v2
-1234
invalid input. input must or higher than 0

zvasoup@nixos:~/D/o/u/f/A/Pekan-7
$
```

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```
Program Tanki Air
Kamus
    tankSize, bucket : integer
    tankFull : boolean
Algoritma
    input( tankSize )
    tankFull <- false

    WHILE ( !tankFull ) DO
        input( bucket )
        IF ( bucket < 0 ) THEN
            output( “invalid input. bucket must be or higher than 0” )
        ELSE
            tankSize -= bucket
        END IF

        IF ( tankSize <= 0 ) THEN
            tankFull = !tankFull
        END IF

        output ( tankFull )
    END WHILE

Endprogram
```

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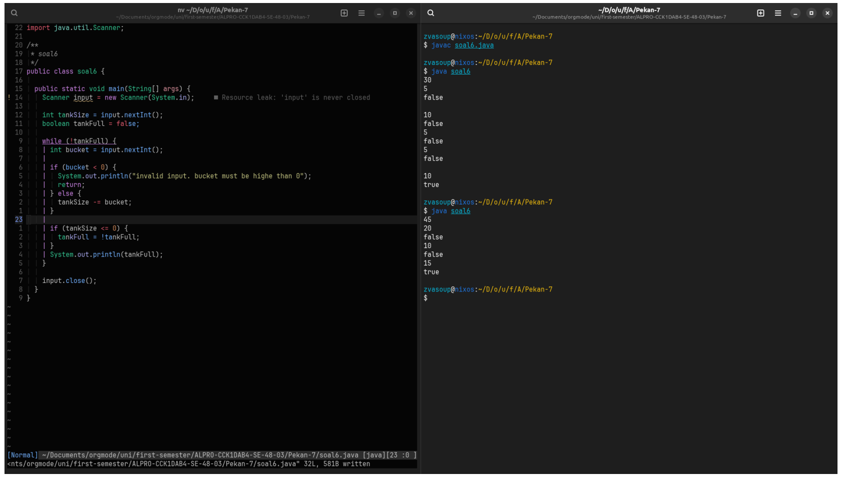

nv ~/D/o/u/f/A/Pekan-7
~/Documents/orgmode/uni/first-semester/ALPRO-CCK1DAB4-SE-48-03/Pekan-7

```java
import java.util.Scanner;

/**
 * soal6
 */
public class soal6 {

  public static void main(String[] args) {
    Scanner input = new Scanner(System.in);     ■ Resource leak: 'input' is never closed

    int tankSize = input.nextInt();
    boolean tankFull = false;

    while (!tankFull) {
      int bucket = input.nextInt();

      if (bucket < 0) {
        System.out.println("invalid input. bucket must be highe than 0");
        return;
      } else {
        tankSize -= bucket;
      }

      if (tankSize <= 0) {
        tankFull = !tankFull;
      }
      System.out.println(tankFull);
    }

    input.close();
  }
}
```

```
[Normal] ~/Documents/orgmode/uni/first-semester/ALPRO-CCK1DAB4-SE-48-03/Pekan-7/soal6.java [java][23 :0 ]
<nts/orgmode/uni/first-semester/ALPRO-CCK1DAB4-SE-48-03/Pekan-7/soal6.java" 32L, 581B written
```

~/D/o/u/f/A/Pekan-7
~/Documents/orgmode/uni/first-semester/ALPRO-CCK1DAB4-SE-48-03/Pekan-7

```
zvasoup@nixos:~/D/o/u/f/A/Pekan-7
$ javac soal6.java

zvasoup@nixos:~/D/o/u/f/A/Pekan-7
$ java soal6
30
5
false

10
false
5
false
5
false

10
true

zvasoup@nixos:~/D/o/u/f/A/Pekan-7
$ java soal6
45
20
false
10
false
15
true

zvasoup@nixos:~/D/o/u/f/A/Pekan-7
$
```

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