

**TUGAS
PEMROGRAMAN BERORIENTASI OBJEK**



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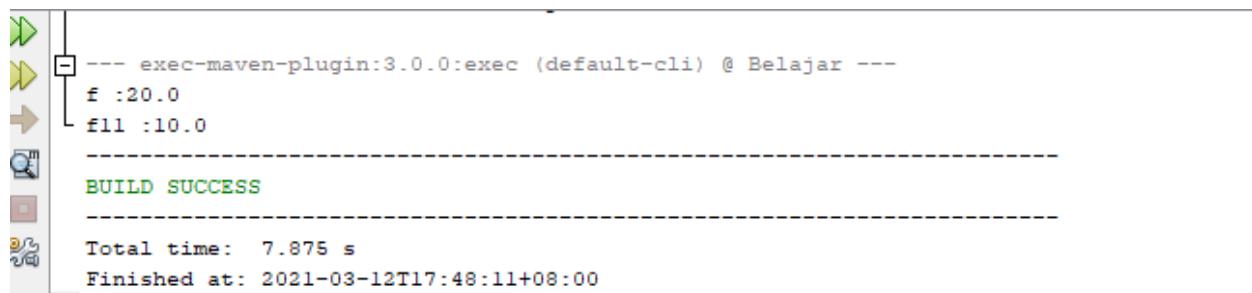
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A1

**PROGRAM STUDI TEKNIK INFORMATIKA
FAKULTAS ILMU KOMPUTER
UNIVERSITAS MUSLIM INDONESIA
MAKASSAR
2021**

1. Program 1

```
12  public class Asgdll {  
13  
14      /**  
15      * @param args the command line arguments  
16      */  
17      public static void main(String args[]) {  
18          // TODO code application logic here  
19          float f = 20.0f;  
20          double f11;  
21  
22          f11 = 10.0f;  
23          System.out.println("f :" + f + "\nf11 :" + f11);  
24      }  
25  }
```

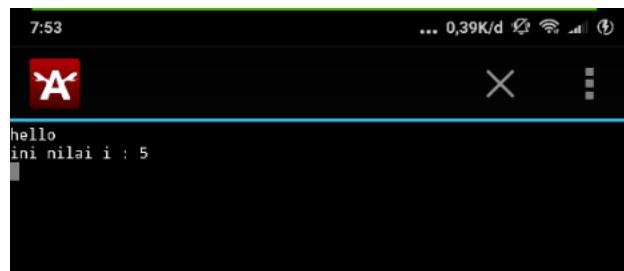


```
--- exec-maven-plugin:3.0.0:exec (default-cli) @ Belajar ---  
f :20.0  
f11 :10.0  
-----  
BUILD SUCCESS  
-----  
Total time: 7.875 s  
Finished at: 2021-03-12T17:48:11+08:00
```

Mencetak angka yang ada pada variabel f dan f11 yang memiliki tipe data float dan double.

2. Program 2

```
12  public class Asign {  
13  
14      /**  
15      * @param args the command line arguments  
16      */  
17      public static void main(String args[]) {  
18          // TODO code application logic here  
19          int i;  
20  
21          System.out.print("Hello\n"); i = 5;  
22          System.out.println("ini nilai i :" + i);  
23      }  
24  }
```



```
7:53 ... 0,39K/d X :::  
A  
hello  
ini nilai i : 5
```

3. Program 3

```
7:59
Anacode
package Tugas1;

public class Tugas_PBO {
    public static void main(String[] args) {
        short ks = 1;
        int k1 = 1;
        long k1l = 10000;
        char c = 65; /* inisialisasi karakter dengan integer */
        char c1 = 'Z'; /* inisialisasi karakter dengan karakter */
        double x = 50.2f;
        float y = 50.2f;
    /* Algoritma */
    /* penulisan karakter sebagai karakter */
    }

7:59
Anacode
public static void main(String[] args)
{
    short ks = 1;
    int k1 = 1;
    long k1l = 10000;
    char c = 65; /* inisialisasi karakter dengan integer */
    char c1 = 'Z'; /* inisialisasi karakter dengan karakter */
    double x = 50.2f;
    float y = 50.2f;
/* Algoritma */
/* penulisan karakter sebagai karakter */
    System.out.println ("Karakter = "+ c);
    System.out.println ("Karakter = "+ c1);
    /* penulisan karakter sebagai integer */
    System.out.println ("Karakter = "+ c);
    System.out.println ("Karakter = "+ c1);
    System.out.println ("Bilangan integer (short) = " + ks);
    System.out.println ("Bilangan integer (int) = " + k1);
    System.out.println ("Bilangan long = " + k1l);
    System.out.println ("Bilangan Real x = " + x);
    System.out.println ("Bilangan Real y = " + y);
}

7:59
Anacode
/* Algoritma */
/* penulisan karakter sebagai karakter */
System.out.println ("Karakter = "+ c);
System.out.println ("Karakter = "+ c1);
/* penulisan karakter sebagai integer */
System.out.println ("Karakter = "+ c);
System.out.println ("Karakter = "+ c1);
System.out.println ("Bilangan integer (short) = " + ks);
System.out.println ("Bilangan integer (int) = " + k1);
System.out.println ("Bilangan long = " + k1l);
System.out.println ("Bilangan Real x = " + x);
System.out.println ("Bilangan Real y = " + y);

}

```

```
Karakter = A
Karakter = Z
Karakter = A
Bilangan integer (short) = 1
(int) 1
(Bilangan long) 10000
Bilangan Real x = 50.2
Bilangan Real y = 50.2
```

4. Program 4

```
8:14
Anacode
package Tugas1;

import java.util.Scanner;
/* contoh membaca integer menggunakan Class Scanner*/
public class Tugas_PBO {
    /* */
    /* @param args
    */
    public static void main(String[] args) {
        // TODO Auto-generated method stub
        /* Kamus */
        int a;
        Scanner masukan;
        /* Program */
        System.out.println("Contoh membaca dan menulis," + "ketik nilai integer: \n");
        masukan = new Scanner(System.in);
    }

8:13
Anacode
Contoh membaca dan menulis,ketik nilai integer:
3
Nilai yang dibaca : 3
```

```
8:14
Anacode
public class Tugas_PBO {
    /**
     * @param args
     */
    public static void main(String[] args) {
        // TODO Auto-generated method stub
        /* Kamus */
        int a;
        Scanner masukan;
        /* Program */
        System.out.println("Contoh membaca dan menulis," + "ketik nilai integer: \n");
        masukan = new Scanner(System.in);
        a = masukan.nextInt(); /* coba ketik : masukan.nextInt(); ; Apa akibatnya ??*/
        System.out.print ("Nilai yang dibaca : " + a);
    }
}
```

5. Program 5

```
17:04
Anacode
1 package Tugas1;
2
3 import java.io.BufferedReader;
4 import java.io.IOException;
5 import java.io.InputStreamReader;
6 //import javax.swing.*;
7 public class Tugas_PBO {
8     /*
9     * @param args
10    *throws IOException
11    */
12    public static void main (String[] args) throws IOException{
13        // TODO Auto-generated method stub
14        /* Kamus */
15        Char cc;
16        int bil;
    }

17:04
Anacode
17 InputStreamReader isr = new InputStreamReader(System.in);
18 BufferedReader dataIn = new BufferedReader(isr);
19 // atau
20 BufferedReader dataIn = new BufferedReader(new
21 InputStreamReader(System.in));
22 /* Algoritma */
23 System.out.print ("hello\n");
24 System.out.print("baca 1 karakter : ");
25 //perintah baca karakter cc
26 cc =dataIn.readLine().charAt(0);
27 System.out.print("baca 1 bilangan : ");
28 //perintah baca bil
29 bil =Integer.parseInt(dataIn.readLine());
30 /*String kar = JOptionPane.showInputDialog("Karakter 1 : ");
31 System.out.println(kar);*/
32 //JOptionPane.showMessageDialog(null, "hello");
33 System.out.print (cc +"\n"+bil+"\n");
34 System.out.print ("bye \n");
35 }
36 }
```

```
17:04
Anacode
17 System.out.print ("hello\n");
18 System.out.print("baca 1 karakter : ");
19 //perintah baca karakter cc
20 cc =dataIn.readLine().charAt(0);
21 System.out.print("baca 1 bilangan : ");
22 //perintah baca bil
23 bil =Integer.parseInt(dataIn.readLine());
24 /*String kar = JOptionPane.showInputDialog("Karakter 1 : ");
25 System.out.println(kar);*/
26 //JOptionPane.showMessageDialog(null, "hello");
27 System.out.print (cc +"\n"+bil+"\n");
28 System.out.print ("bye \n");
29 
```

```
Selamat datang
baca 1 karakter : a
baca 1 bilangan : 3
a
3
bye
```

6. Program 6

```
8:56 Anacode 0.05K/d
12 public static void main(String[] args) throws IOException {
13 // TODO Auto-generated method stub
14 /* Kamus */
15 int a=5,b=6;
16 float d=2.5,f,e=3.2f;
17 char g='5';
18 double k=3.14;
19 System.out.println((float)a);
20 System.out.println((double)b); // int <- double
21 System.out.println((int)d); // float <- int
22 System.out.println((double)e); // float <- double
23 System.out.println((int)g); // char <- int (ASCII)
24 System.out.println((float)g); // char <- float (ASCII)
25 System.out.println((double)g); // char <- double (ASCII)
26 System.out.println((int)k); // double <- int
27 System.out.println((float)k); // double <- float
-> ; . : , = \ / * " ' ( ) { } [ ] :
```

```
8:57
5.0
6.0
2
3.200000047683716
33
53.0
53.0
3
3.14
```

7. Program 7

```
9:11 Anacode 0.20K/d
11 /*
12 public static void main(String[] args){
13 // TODO Auto-generated method stub
14 /* Kamus */
15 int a=8,b=9;
16 float d=2.5,f,e=3.2f;
17 char g='5';
18 double k=3.14;
19 String n="67",m="45", l="100";
20 a = Integer.parseInt(n); /*Konversi String ke Integer*/
21 b = Double.parseDouble(m); /*Konversi String ke Double*/
22 d = Float.parseFloat(l); /*Konversi String ke Float*/
23 System.out.println("a : "+a+"\n b : "+b+"\n d : "+d);
24 n = String.valueOf(b); /*Konversi Integer ke String*/
25 m = String.valueOf(g); /*Konversi Karakter ke String*/
26 l = String.valueOf(e); /*Konversi Float ke String*/
27 System.out.println("n : "+n+"\nm : "+m+"\nl : "+l);
-> ; . : , = \ / * " ' ( ) { } [ ] :
```

```
9:11
char g='5';
double k=3.14;
String n="67",m="45", l="100";
a = Integer.parseInt(n); /*Konversi String ke Integer*/
b = Double.parseDouble(m); /*Konversi String ke Double*/
d = Float.parseFloat(l); /*Konversi String ke Float*/
System.out.println("a : "+a+"\n b : "+b+"\n d : "+d);
n = String.valueOf(b); /*Konversi Integer ke String*/
m = String.valueOf(g); /*Konversi Karakter ke String*/
l = String.valueOf(e); /*Konversi Float ke String*/
System.out.println("n : "+n+"\nm : "+m+"\nl : "+l);
-> ; . : , = \ / * " ' ( ) { } [ ] :
```

```
8:59
A
x
k : 67
d : 45.0
l : 100.0
-
n : 5
l : 3.2
m : 9.0
c : 9.0
l : 3.2
```

8. Program 8

```
9:13 Anacode 0.23K/d
11 /*
12 public static void main(String[] args){
13 // TODO Auto-generated method stub
14 /* Kamus */
15 int x = 1;
16 int y = 2;
17 /* ALGORITMA */
18 System.out.print("x = "+ x + "\n");
19 System.out.print("y = "+ y + "\n");
20 System.out.print("hasil ekspresi = (x<y)?x:y = "+ ((x < y) ?
21 x : y)); /*Gunakan dalam kurung "(statemen dan kondisi)" untuk menyatakan
22 satu kesatuan pernyataan/
23 }
24 }

-> ; . : , = \ / * " ' ( ) { } [ ] :
```

```
9:13
x = 1
y = 2
hasil ekspresi = (x<y)?x:y = 1
```

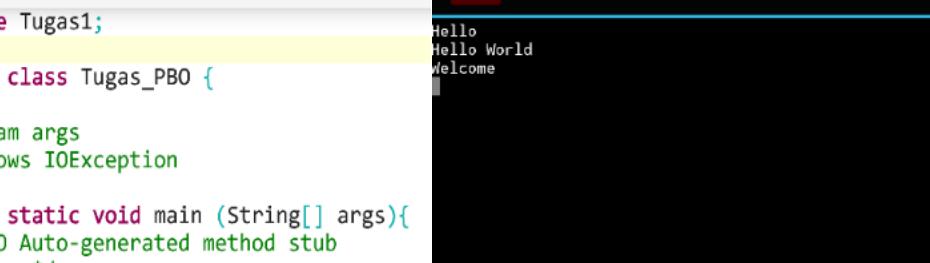
9. Program 9

```
15:58 Anacode 0.00K/d
12 public static void main(String[] args){
13 // TODO Auto-generated method stub
14 /* Kamus */
15 int x = 1; int y = 2; float fx; float fy;
16 /* ALGORITMA */
17 System.out.print ("\nx/y (format integer) = "+ x/y);
18 System.out.print ("\nx/y (format float) = "+ x/y);
19 /* supaya hasilnya tidak nol */
20 fx=x;
21 fy=y;
22 System.out.print ("\nx/y (format integer) = "+ fx/fy);
23 System.out.print ("\nx/y (format float) = "+ fx/fy);
24 /* casting */
25 System.out.print ("\nfloat(x)/float(y) (format integer) = "+
26 (float)x/(float)y);
27 System.out.print ("\nfloat(x)/float(y) (format float) = "+
28 (float)x/(float)y);
29 x = 10; y = 3;
30 System.out.print ("\nx/y (format integer) = "+ x/y);
31 System.out.print ("\nx/y (format float) = "+ x/y);
32 }
33 }
```

```
15:58
* supaya hasilnya tidak nol
fx=x;
fy=y;
System.out.print ("\nx/y (format integer) = "+ fx/fy);
System.out.print ("\nx/y (format float) = "+ fx/fy);
/* casting */
System.out.print ("\nfloat(x)/float(y) (format integer) = "+
(float)x/(float)y);
System.out.print ("\nfloat(x)/float(y) (format float) = "+
(float)x/(float)y);
x = 10; y = 3;
System.out.print ("\nx/y (format integer) = "+ x/y);
System.out.print ("\nx/y (format float) = "+ x/y);
-> ; . : , = \ / * " ' ( ) { } [ ] :
```

```
9:14 0.25K/d 🔍 ⌂ ⓘ X ⋮  
x/y (format integer) = 0  
x/y (format float) = 0  
x/y (format integer) = 0.5  
x/y (format float) = 0.5  
float(x)/float(y) (format integer) = 0.5  
float(x)/float(y) (format float) = 0.5  
x/y (format integer) = 3  
x/y (format float) = 3
```

10. Program



The screenshot shows the Anacode IDE interface. On the left, the code editor displays a Java file named Tugas1.java. The code contains a main method that prints "Hello", "Hello World", and "Welcome" to the console. On the right, the terminal window shows the execution results: "Hello", "Hello World", and "Welcome".

```
1 package Tugas1;
2
3 public class Tugas_PBO {
4 /**
5 * @param args
6 * @throws IOException
7 */
8 public static void main (String[] args){
9 // TODO Auto-generated method stub
10 /* Kamus */
11     System.out.print("Hello");
12 /* menuliskan hello dan ganti baris*/
13 System.out.print("\nHello ");
14 /* menuliskan hello dan ganti baris*/
15 System.out.println("World");
16 System.out.println("Welcome");
17 }
18 }
```

```
Hello
Hello World
Welcome
```

11. Program 11

The screenshot shows the Anacode IDE interface. On the left, the code editor displays a Java program named Tugas_PBO. The code includes a package declaration, a class definition, and a main method. The main method initializes two integers, i and j, both set to 3. It then increments i and prints the values of both variables. The code is color-coded for syntax highlighting. On the right, the terminal window shows the execution results: "Nilai i : 5" and "Nilai j : 3".

```
1 package Tugas1;
2
3 public class Tugas_PBO {
4 /**
5 * @param args
6 * @throws IOException
7 */
8 public static void main (String[] args){
9 // TODO Auto-generated method stub
10 /* Kamus */
11 int i, j;
12 /* Program */
13 i = 3;
14 j = i++;
15 System.out.println ("Nilai i : " + (++i) +
16 "\nNilai j : " + j);
17 }
18 }
```

12. Program 12

The screenshot shows the Anacode IDE interface. On the left, a Java code editor displays the following code:

```
public static void main (String[] args){  
    // TODO Auto-generated method stub  
    /* Kamus */  
    int n = 10; /* 1010 */  
    int x = 1; /* 1 */  
    int y = 2; /* 10 */  
    System.out.println ("n = " + n);  
    System.out.println ("x = " + x);  
    System.out.println ("y = " + y);  
    System.out.println ("n & 8 = " + (n & 8)); /* 1010 AND 1000 */  
    System.out.println ("x & ~8 = " + (x & ~8)); /* 1 AND 0111 */  
    System.out.println ("y << 2 = " + (y << 2)); /* 10 ==> 1000 = 8 */  
    System.out.println ("y >> 3 = " + (y >>3)); /* 10 ==> 0000 = 0 */  
}
```

On the right, the assembly output window shows the generated assembly code:

```
n = 10  
x = 1  
y = 2  
n & 8 = 8  
x & ~8 = 1  
y << 2 = 4  
y >> 3 = 0
```

13. Program 13

```
16 System.out.println("i = "+(int) i);
17 System.out.println("j = "+ j);
18 System.out.println("i & j = "+(i & j)); /* 0: 00000000 dalam
19 biner */
20 System.out.println("i | j = "+(i | j)); /* 7:
21 00000111 biner */
22 System.out.println("i ^ j = "+(i ^ j)); /* 7:
23 00000111 biner Ingat!!! operator '^' pada bahasa java bukan
sebagai pangkat*/
25 System.out.println(Math.pow(i, j)); /* Class Math
memiliki method pow(a,b) untuk pemangkatan*/
27 System.out.println(~i = "+~i); /* 4: 11111100
28 biner */
29 }
30 }
```

14. Program 14

```
8 public static void main (String[] args){
9 // TODO Auto-generated method stub
10 /*int i = 0; /* perhatikan int i,j=0 bukan seperti ini */
11 int j = 0;
12 char c = 8; char d = 10;
13 int e = (((int)c > (int)d) ? c: d);
14 int k = ((i>j) ? i: j);
15 /* ALGORITMA */
16 System.out.print ("Nilai e = "+ e);
17 System.out.print ("\nNilai k = "+ k);
18 i = 2;
19 j = 3;
20 k = ((i++>j++) ? i: j );
21 System.out.print ("\nNilai k = "+ k);
22 }
23 }
```

```
i = 3
i & j = 0
i | j = 7
81.0
~i = -4
```

15. Program 15

```
8 public static void main (String[] args){
9 // TODO Auto-generated method stub
10 int i = 0; /* perhatikan int i,j=0 bukan seperti ini */
11 int j = 0;
12 char c = 8; char d = 10;
13 int e = (((int)c > (int)d) ? c: d);
14 int k = ((i>j) ? i: j);
15 /* ALGORITMA */
16 System.out.print ("Nilai e = "+ e);
17 System.out.print ("\nNilai k = "+ k);
18 i = 2;
19 j = 3;
20 k = ((i++>j++) ? i: j );
21 System.out.print ("\nNilai k = "+ k);
22 }
23 }
```

```
Nilai e = 10
Nilai k = 0
Nilai k = 4
```

16. Program 16

```
1 package Tugas1;
2
3 public class Tugas_PBO {
4 /**
5 * @param args
6 * @throws IOException
7 */
8 public static void main (String[] args){
9 // TODO Auto-generated method stub
10 boolean Bool1, Bool2, TF , int i,j, hsl ;
11 float x,y,res;
12 /* algoritma */
13 /* System.out.println("Silahkan baca teksnya dan tambahkan perintah untuk menampilkan output");
14 Bool1 = true; Bool2 = false;
15 TF = Bool1 && Bool2 ; /* Boolean AND */
16 TF = Bool1 || Bool2 ; /* Boolean OR */
```

```
17 TF = ! Bool1; /* NOT */
18 TF = Bool1 ^ Bool2; /* XOR */
19 /* operasi numerik */
20 i = 5; j = 2 ;
21 hsl = i+j; hsl = i - j; hsl = i / j; hsl = i * j;
22 hsl = i / j; /* pembagian bulat */
23 hsl = i % j; /* siswa. modulo */
24 /* operasi numerik */
25 x = 5 ; y = 5 ;
26 res = x + y; res = x - y; res = x / y; res = x *
27 y;
28 /* operasi relasional numerik */
29 TF = (i==j); TF = (i!=j);
30 TF = (i < j); TF = (i > j); TF = (i <= j); TF =
31 (i >= j);
32 /* operasi relasional numerik */
33 TF = (x != y);
34 TF = (x < y); TF = (x > y); TF = (x <= y); TF =
35 (x >= y);
36 }
37 }
```

```
27 y;
28 /* operasi relasional numerik */
29 TF = (i==j); TF = (i!=j);
30 TF = (i < j); TF = (i > j); TF = (i <= j); TF =
31 (i >= j);
32 /* operasi relasional numerik */
33 TF = (x != y);
34 TF = (x < y); TF = (x > y); TF = (x <= y); TF =
35 (x >= y);
36 }
37 }
```

```
Silahkan baca teksnya dan tambahkan perintah untuk menampilkan output
```