

Laporan Tugas 1



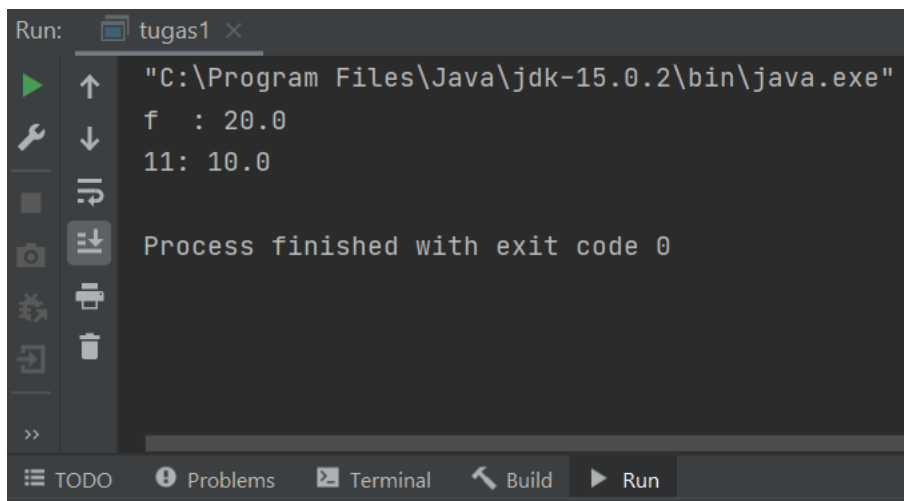
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**PROGRAM STUDI TEKNIK INFORMATIKA
FAKULTAS ILMU KOMPUTER
UNIVERSITAS MUSLIM INDONESIA MAKASSAR
2021**

PROGRAM 1



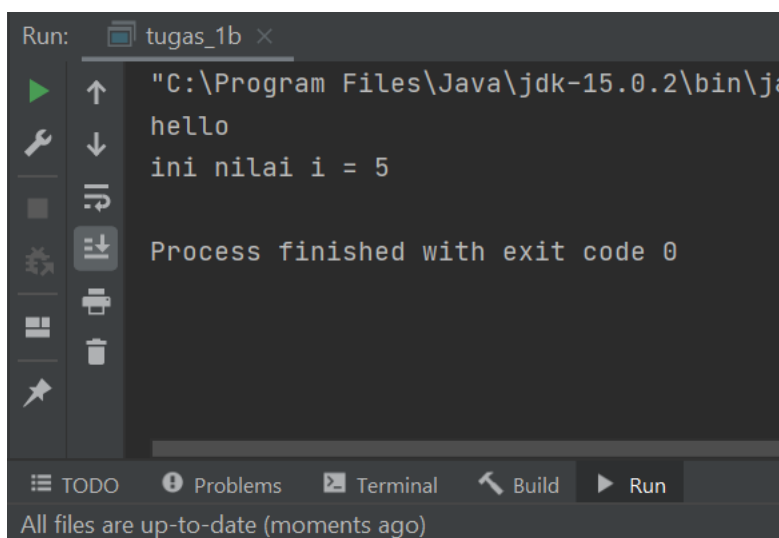
```
Run: tugas1 x
"C:\Program Files\Java\jdk-15.0.2\bin\java.exe"
f : 20.0
11: 10.0

Process finished with exit code 0
```

The screenshot shows the Run console of an IDE. The title bar says "Run: tugas1 x". The console output shows the command "C:\Program Files\Java\jdk-15.0.2\bin\java.exe" being executed. Below that, the output is "f : 20.0" and "11: 10.0". At the bottom, it says "Process finished with exit code 0". The IDE interface includes a sidebar with icons for Run, Debug, and other tools, and a bottom status bar with tabs for TODO, Problems, Terminal, Build, and Run.

Program menampilkan nilai floating point yang disimpan dalam tipe data float dan double

PROGRAM 2



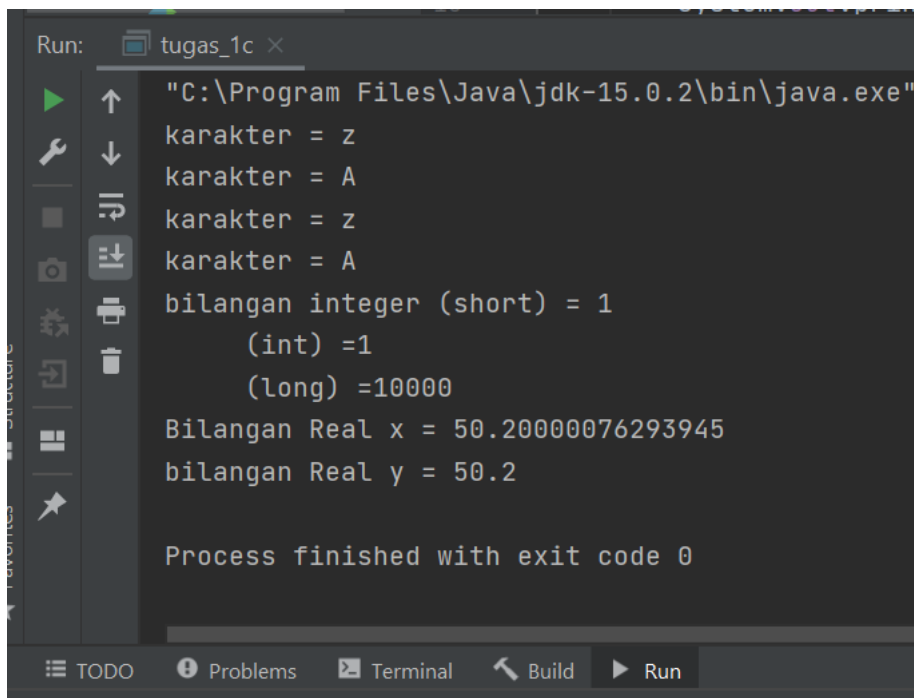
```
Run: tugas_1b x
"C:\Program Files\Java\jdk-15.0.2\bin\ja
hello
ini nilai i = 5

Process finished with exit code 0
```

The screenshot shows the Run console of an IDE. The title bar says "Run: tugas_1b x". The console output shows the command "C:\Program Files\Java\jdk-15.0.2\bin\ja" being executed. Below that, the output is "hello" and "ini nilai i = 5". At the bottom, it says "Process finished with exit code 0". The IDE interface includes a sidebar with icons for Run, Debug, and other tools, and a bottom status bar with tabs for TODO, Problems, Terminal, Build, and Run. A message at the bottom of the console says "All files are up-to-date (moments ago)".

Menampilkan nilai dari integer.

PROGRAM 3

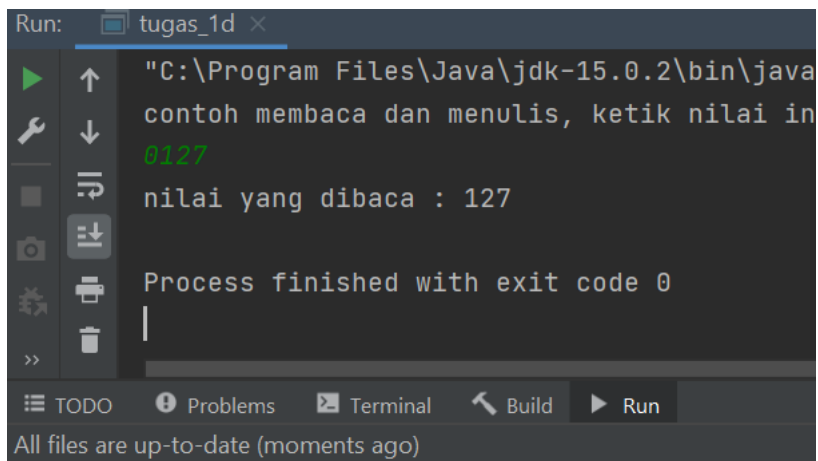


```
Run: tugas_1c x
"C:\Program Files\Java\jdk-15.0.2\bin\java.exe"
karakter = z
karakter = A
karakter = z
karakter = A
bilangan integer (short) = 1
(int) =1
(long) =10000
Bilangan Real x = 50.20000076293945
bilangan Real y = 50.2

Process finished with exit code 0
```

Menampilkan penggunaan dari beberapa tipe data.

PROGRAM 4

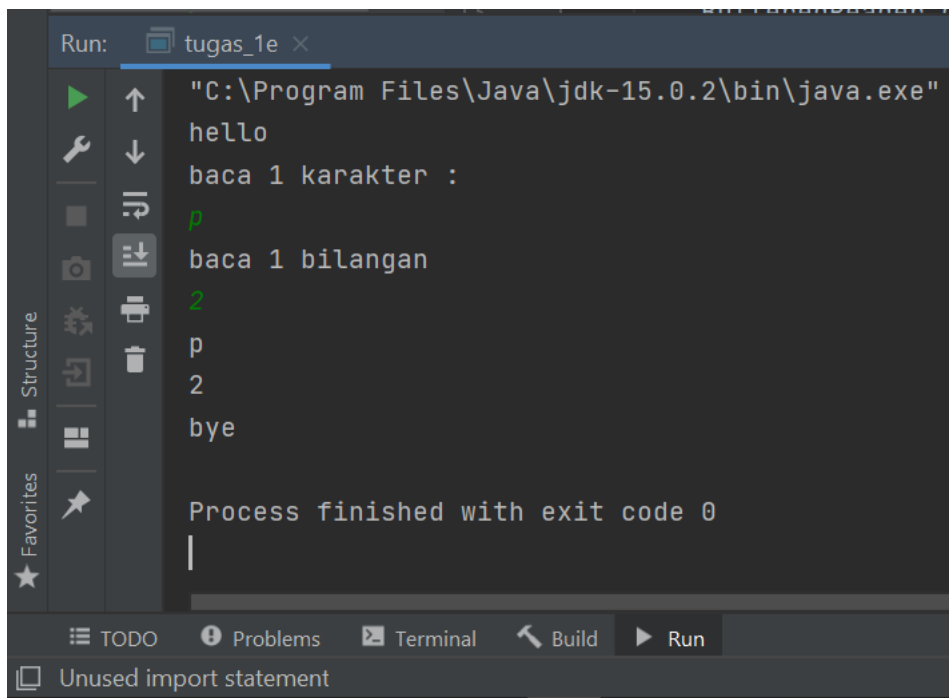


```
Run: tugas_1d x
"C:\Program Files\Java\jdk-15.0.2\bin\java
contoh membaca dan menulis, ketik nilai in
0127
nilai yang dibaca : 127

Process finished with exit code 0
```

Program membaca nilai dengan menggunakan class scanner,(import.java.util.Scanner).

PROGRAM 5

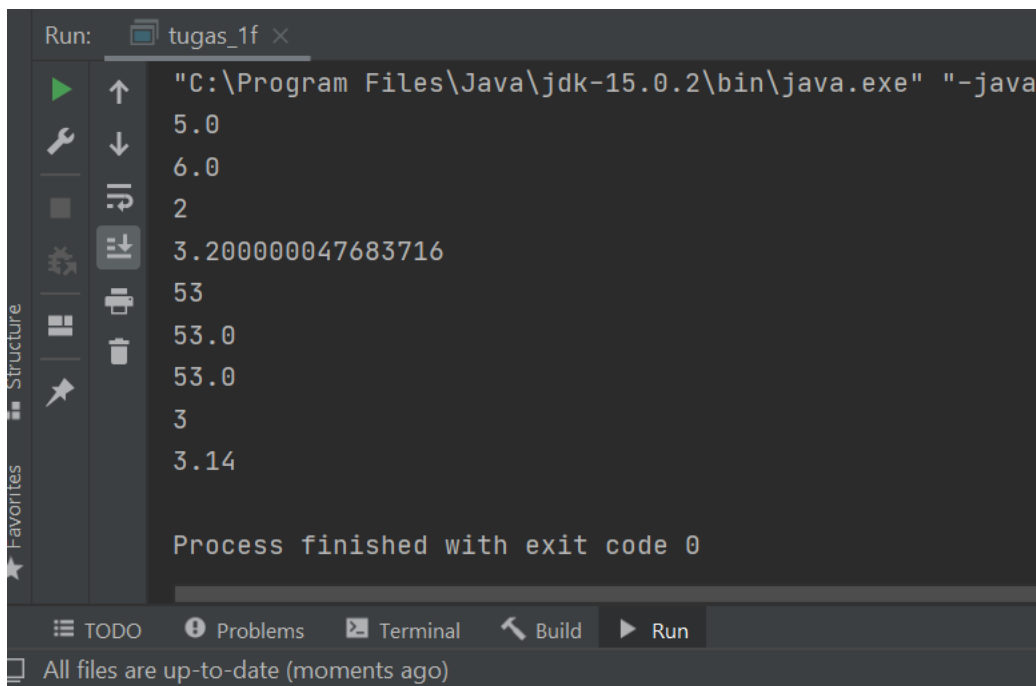


```
Run: tugas_1e x
"C:\Program Files\Java\jdk-15.0.2\bin\java.exe"
hello
baca 1 karakter :
p
baca 1 bilangan
2
p
2
bye

Process finished with exit code 0
```

membaca karakter dengan menggunakan input stream, diawali dengan mengimport paket **java.io.BufferedReader** dan **InputStreamReader** kemudian membuat objek untuk keduanya. Untuk menerima inputan digunakan method `readline()`.

PROGRAM 6

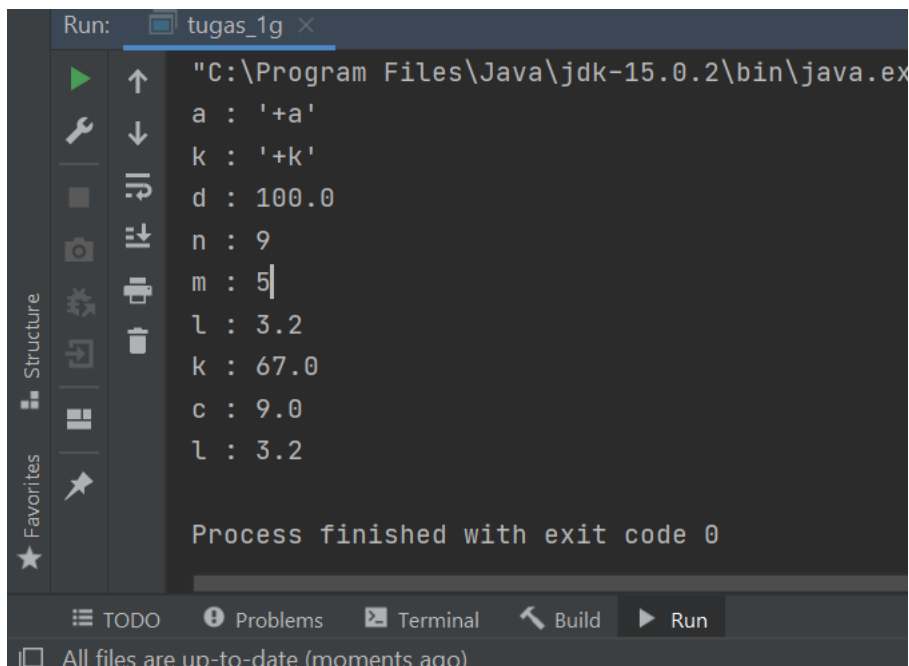


```
Run: tugas_1f x
"C:\Program Files\Java\jdk-15.0.2\bin\java.exe" "-java
5.0
6.0
2
3.2000000047683716
53
53.0
53.0
3
3.14

Process finished with exit code 0
```

menampilkan nilai variabel yang diubah kedalam tipe data yang lain (casting), seperti nilai integer yang di casting dengan float, dll

PROGRAM 7

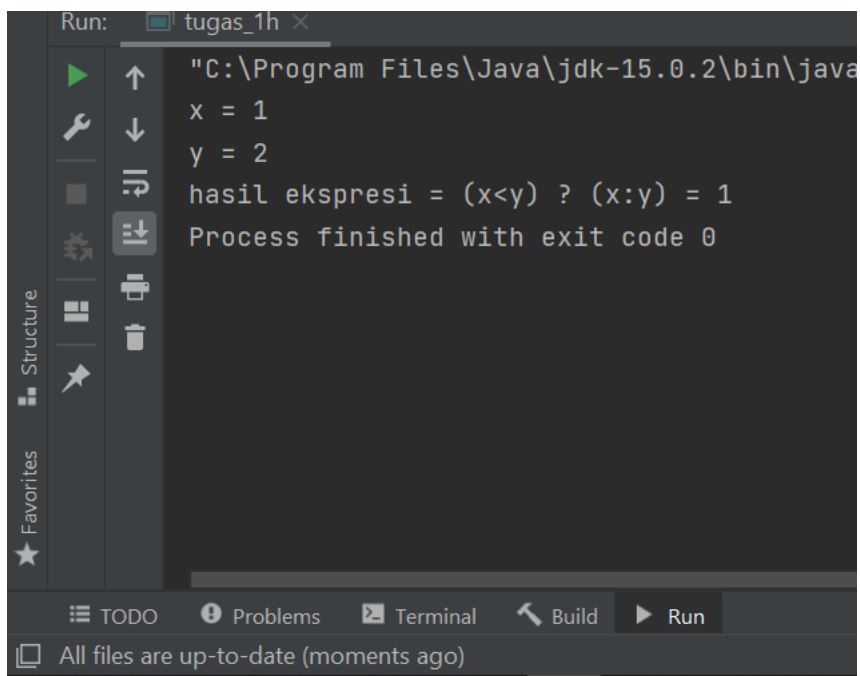


```
Run: tugas_1g x
"C:\Program Files\Java\jdk-15.0.2\bin\java.exe"
a : '+a'
k : '+k'
d : 100.0
n : 9
m : 5
l : 3.2
k : 67.0
c : 9.0
l : 3.2

Process finished with exit code 0
```

menampilkan nilai variabel yang diubah kedalam tipe data yang lain (casting) menggunakan tipe data class, seperti string yang dikonversi ke integer menggunakan method `parseInt`, dll

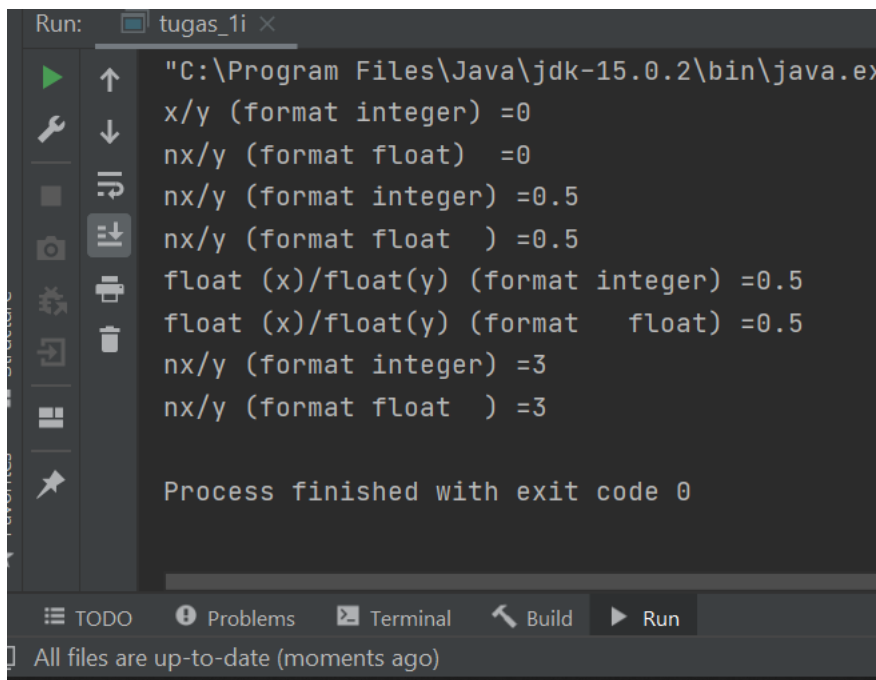
PROGRAM 8



```
Run: tugas_1h x
"C:\Program Files\Java\jdk-15.0.2\bin\java.exe"
x = 1
y = 2
hasil ekspresi = (x<y) ? (x:y) = 1
Process finished with exit code 0
```

Program menampilkan penggunaan ternary. Jika $1 < 2$ maka tampilkan 1, jika tidak maka tampilkan 2

PROGRAM 9

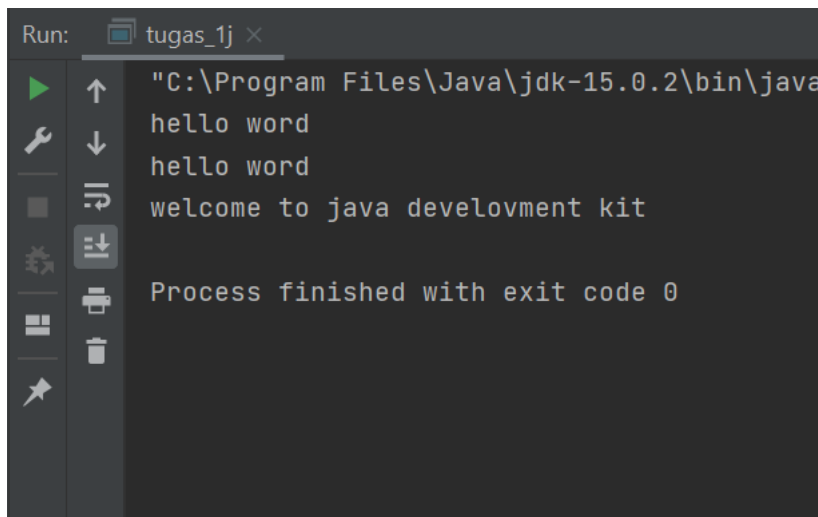


```
Run: tugas_1i x
"C:\Program Files\Java\jdk-15.0.2\bin\java.exe"
x/y (format integer) =0
nx/y (format float) =0
nx/y (format integer) =0.5
nx/y (format float ) =0.5
float (x)/float(y) (format integer) =0.5
float (x)/float(y) (format float) =0.5
nx/y (format integer) =3
nx/y (format float ) =3

Process finished with exit code 0
```

menampilkann nilai pembagian dari 1 / 2 dengan tipe data integer, kemudian di casting ke float agar hasilnya tidak 0

PROGRAM 10

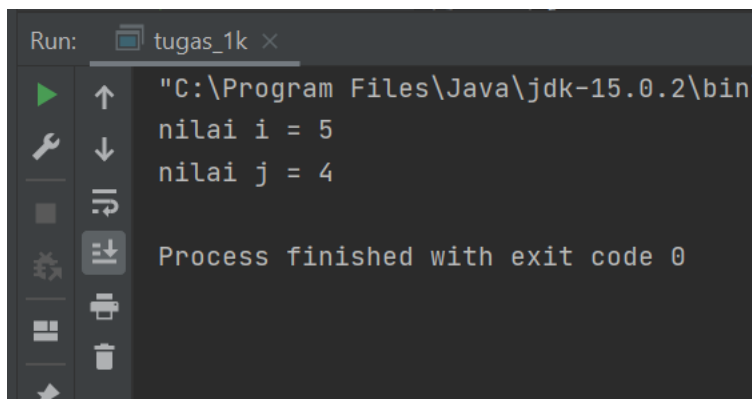


```
Run: tugas_1j x
"C:\Program Files\Java\jdk-15.0.2\bin\java"
hello word
hello word
welcome to java develovment kit

Process finished with exit code 0
```

menampilkan penggunaan dan perbedaan antara System.out.print dengan System.out.println

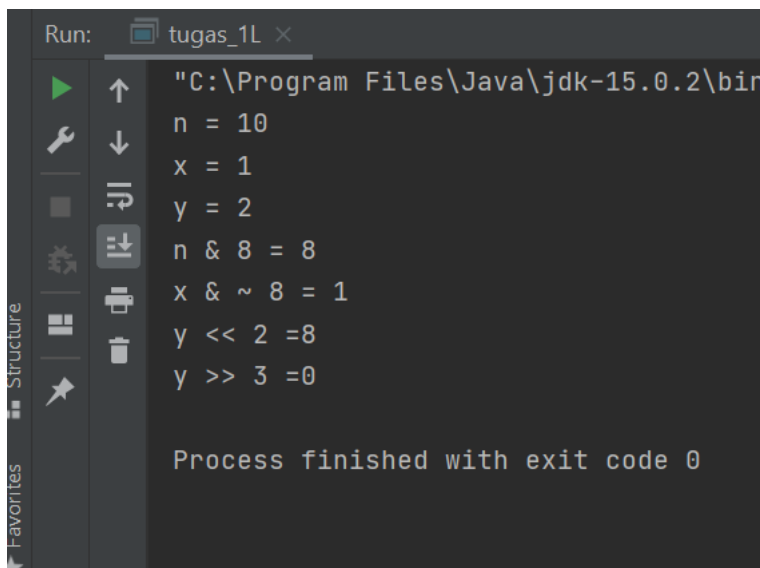
PROGRAM 11



```
Run: tugas_1k x
"C:\Program Files\Java\jdk-15.0.2\bin\
nilai i = 5
nilai j = 4
Process finished with exit code 0
```

menampilkan nilai i (3) setelah di increment sebanyak 2 kali maka menjadi 5, kemudian nilai J menampilkan nilai 4 karena di inisialisasi menggunakan prefix yaitu ditambahkan terlebih dahulu.

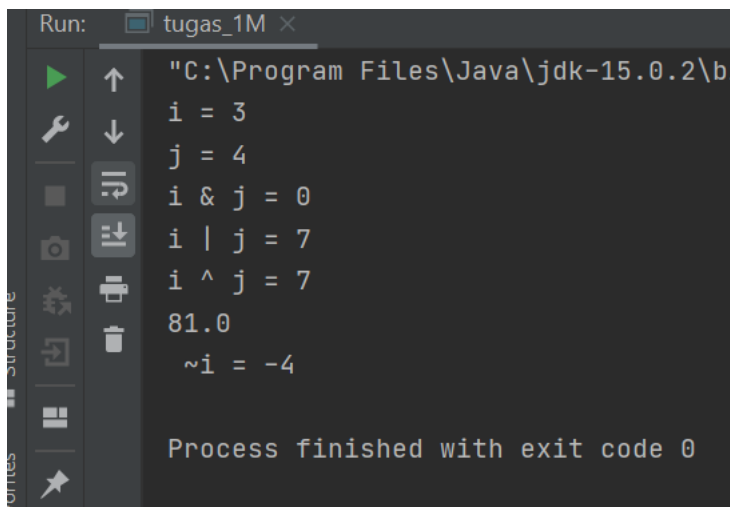
PROGRAM 12



```
Run: tugas_1L x
"C:\Program Files\Java\jdk-15.0.2\bin
n = 10
x = 1
y = 2
n & 8 = 8
x & ~ 8 = 1
y << 2 = 8
y >> 3 = 0
Process finished with exit code 0
```

Program menampilkan penggunaan operator terhadap bit, $n = 10$ (1010) &(AND) 8 (1000) maka menghasilkan 8 (1000), kemudian penggunaan signed left shift operator yaitu menggeser nilai bit ke kiri kemudian mengisi dengan bit 0 untuk nilai positif: $y = 2$ (10) $\ll 2$, menjadi 8 (1000)

PROGRAM 13

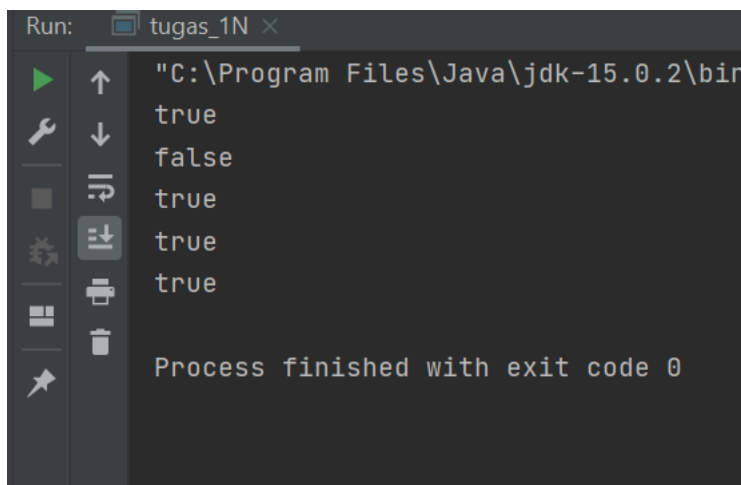


```
Run: tugas_1M x
"C:\Program Files\Java\jdk-15.0.2\bin
i = 3
j = 4
i & j = 0
i | j = 7
i ^ j = 7
81.0
~i = -4

Process finished with exit code 0
```

Program menampilkan penggunaan logical operator terhadap bit & (AND), | (OR), ^ (XOR), ~ (negasi), dan penggunaan class math dengan method pow(a,b) untuk pemangkatan

PROGRAM 14

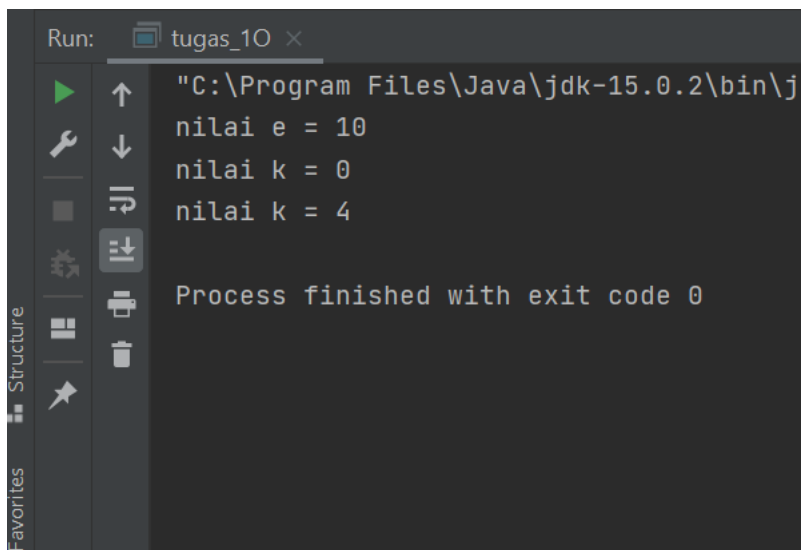


```
Run: tugas_1N x
"C:\Program Files\Java\jdk-15.0.2\bin
true
false
true
true
true

Process finished with exit code 0
```

Program menampilkan hasil dari penggunaan boolean operator, if true AND true (true) then print true AND true (true), dst.

PROGRAM 15



```
Run: tugas_10 x
"C:\Program Files\Java\jdk-15.0.2\bin\j
nilai e = 10
nilai k = 0
nilai k = 4

Process finished with exit code 0
```

Program menampilkan hasil penggunaan ternary dengan casting tipe data char ke integer:

e = jika $8 > 10$,maka 8 jika tidak ,maka 10.

k = jika $0 > 0$,maka 0 jika tidak ,maka 0.

k = jika $3 > 4$,maka 3 jika tidak ,maka 4.

PROGRAM 16

```
True AND False: false
True OR False: true
NOT True: false
True XOR False: true
```

```
5 + 2: 7
5 - 2: 3
5 x 2: 10
5 / 2: 2
5 mod 2: 1
```

```
5 + 5: 10.0
5 - 5: 0.0
5 / 5: 1.0
5 x 5: 25.0
```

```
5 == 2: false
5 != 2: true
5 < 2: false
5 > 2: true
5 <= 2: false
5 >= 2: true
```

```
5 != 5: false
5 < 5: false
5 > 5: false
5 <= 5: true
```

Menampilkan penggunaan operasi numerik dan relasional