

LAPORAN PRAKTIKUM
PEMROGRAMAN BERORIENTASI OBJEK
(Dosen Pengampu : *Dede Husen, M.Kom.*)



Disusun oleh :

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Kelas : TINFC-2023-04

TEKNIK INFORMATIKA
FAKULTAS ILMU KOMPUTER
UNIVERSITAS KUNINGAN

PRETEST

1. Buatlah kelas mahasiswa dengan atribut/variable l= nama dan npm serta mempunyai method : tampilkanNama, tampilkanNpm, belajar, olahRaga, makan, minum.

Script program :

```
package com.example;
```

```
public class Mahasiswa {  
    private String nama;  
    private String nim;
```

```
    public Mahasiswa(String nama, String nim) {  
        this.nama = nama;  
        this.nim = nim;  
    }
```

```
    public void tampilkanNama() {  
        System.out.println("Nama: " + nama);  
    }
```

```
    public void tampilkanNim() {  
        System.out.println("Nim: " + nim);  
    }
```

```
    public void belajar() {  
        System.out.println(nama + " sedang belajar pemrograman berorientasi objek");  
    }
```

```
    public void olahRaga() {  
        System.out.println(nama + " sedang melakukan olahraga.");  
    }
```

```
    public void makan() {  
        System.out.println(nama + " sedang makan.");  
    }
```

```
    public void minum() {  
        System.out.println(nama + " sedang minum.");  
    }
```

```

    }

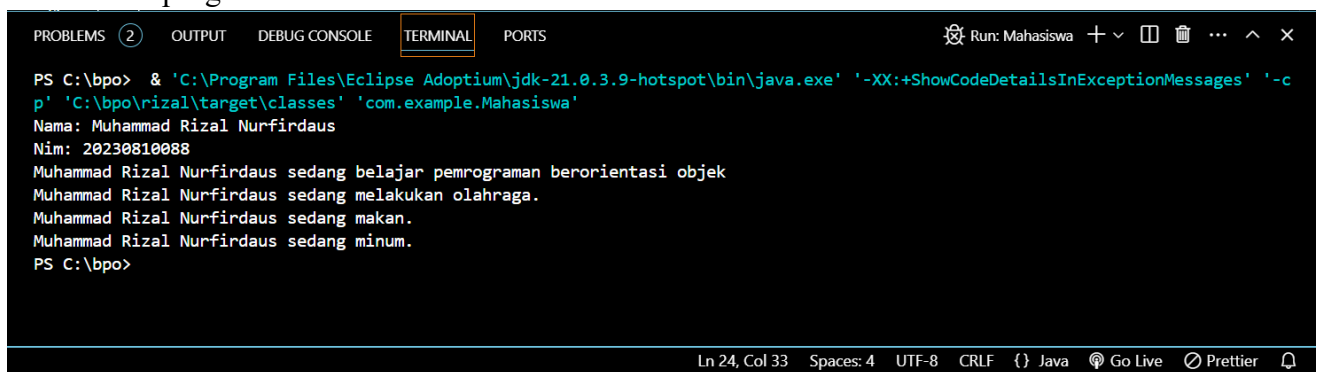
    public static void main(String[] args) {
        Mahasiswa mhs1 = new Mahasiswa("Muhammad Rizal Nurfirdaus", "20230810088");

        mhs1.tampilkanNama();
        mhs1.tampilkanNim();

        mhs1.belajar();
        mhs1.olahRaga();
        mhs1.makan();
        mhs1.minum();
    }
}

```

Run program :



```

PROBLEMS (2) OUTPUT DEBUG CONSOLE TERMINAL PORTS
Run: Mahasiswa + - [ ] [ ] ... ^ x

PS C:\bpo> & 'C:\Program Files\Eclipse Adoptium\jdk-21.0.3.9-hotspot\bin\java.exe' '-XX:+ShowCodeDetailsInExceptionMessages' '-c
p' 'C:\bpo\rizal\target\classes' 'com.example.Mahasiswa'
Nama: Muhammad Rizal Nurfirdaus
Nim: 20230810088
Muhammad Rizal Nurfirdaus sedang belajar pemrograman berorientasi objek
Muhammad Rizal Nurfirdaus sedang melakukan olahraga.
Muhammad Rizal Nurfirdaus sedang makan.
Muhammad Rizal Nurfirdaus sedang minum.
PS C:\bpo>
Ln 24, Col 33 Spaces: 4 UTF-8 CRLF {} Java Go Live Prettier

```

PRAKTIKUM 1.

PRAKTIKUM 1

Kode program :

```

class Orang {
    String nama, gender;    int
    usia;    public String
    tampilNama() {        return
    nama;
    }
    public void caraBerjalan() {
        System.out.println("Tangan Ditaruh Kebelakang");
    }
}

```

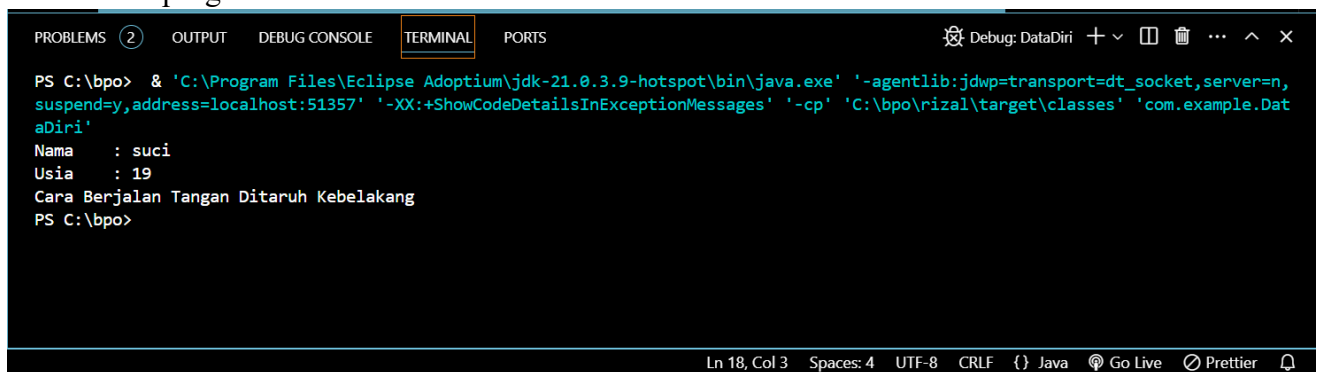
```

        int usiaSekarang() {
return usia;
        }
    }

    public class DataDiri {    public static
void main(String args[]) {    Orang
org = new Orang();    org.nama =
"suci";    org.usia = 19;
        System.out.println("Nama    : " + org.tampilNama());
        System.out.println("Usia    : " + org.usiaSekarang());
System.out.print("Cara Berjalan ");
        org.caraBerjalan();
    }
}

```

Run program :



```

PROBLEMS 2 OUTPUT DEBUG CONSOLE TERMINAL PORTS
Debug: DataDiri + - [ ] ... ^ x
PS C:\bpo> & 'C:\Program Files\Eclipse Adoptium\jdk-21.0.3.9-hotspot\bin\java.exe' '-agentlib:jdwp=transport=dt_socket,server=n,suspend=y,address=localhost:51357' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\bpo\rizal\target\classes' 'com.example.DataDiri'
Nama    : suci
Usia    : 19
Cara Berjalan Tangan Ditaruh Kebelakang
PS C:\bpo>
Ln 18, Col 3 Spaces: 4 UTF-8 CRLF {} Java Go Live Prettier

```

PRAKTIKUM 2

Kode program :

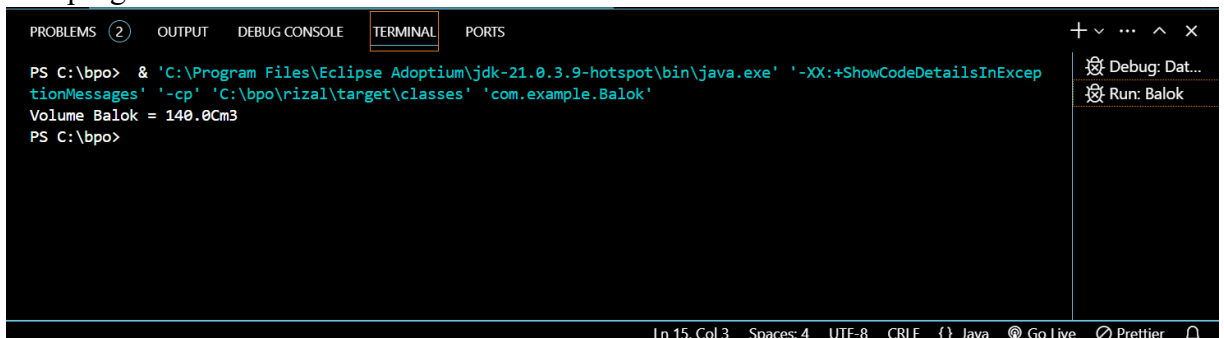
```
public class Balok
{
    double panjang, lebar,
    tinggi;

    public void setPanjang(double panjang){this.panjang =
    panjang;}    public void setLebar(double lebar){this.lebar = lebar;}
    public void setTinggi(double tinggi){this.tinggi = tinggi;}

    public double getPanjang() {return panjang;}    public
    double getLebar() {return lebar;}    public double
    getTinggi() {return tinggi;}    public double getVolume()
    {return panjang*lebar*tinggi;}    public static void main
    (String args[])
    {
        double volume;
        Balok b1 = new
        Balok();    b1.panjang = 7;
        b1.lebar = 4;    b1.tinggi=
        5;

        volume = b1.panjang*b1.lebar*b1.tinggi;
        System.out.println("Volume Balok = " +volume+"Cm3");
    }
}
```

Run program :



```
PROBLEMS (2) OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS C:\bpo> & 'C:\Program Files\Eclipse Adoptium\jdk-21.0.3-hotspot\bin\java.exe' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\bpo\rizal\target\classes' 'com.example.Balok'
Volume Balok = 140.0Cm3
PS C:\bpo>
```

Ln 15, Col 3 Spaces: 4 UTF-8 CRLF {} Java Go Live Prettier

PRAKTIKUM 3

Kode program :

```
public class Manusia1
```

```

{
    public String nama;
    public Manusia1 (String n){
        this.nama = n;
    }
    public String tampilkanNama(){
        return nama;
    }
    public void makan(){
        System.out.println("Nyam...Nyam...Nyam...");
    }
    public void kerja(){
        System.out.println("Kerja...Kerja...");
    }
}
class Jaka1
{
    public static void main(String
    arg[]){
        Manusia1 andi = new Manusia1("jaka");
        System.out.println("Nama "+andi.tampilkanNama());
        andi.kerja();
    }
}

```

Run program :

```

PROBLEMS (2) OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS C:\bpo> & 'C:\Program Files\Eclipse Adoptium\jdk-21.0.3.9-hotspot\bin\java.exe' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\bpo\rizal\target\classes' 'com.example.Jaka'
Nama= Jaka
Nyam... nyam... nyam...
PS C:\bpo>

```

Ln 4, Col 1 (2 selected) Spaces: 4 UTF-8 CRLF () Java Go Live Prettier

PRAKTIKUM 4

Kode program :

```

public class SPP
{
    String nama, nim;
    int spt, spv, sks;
}

```

```

    public SPP(String nama, String nim, int spt, int spv, int
sks){      this.nama = nama; this.nim = nim;      this.spt =
spt;      this.spv = spv;      this.sks = sks;
    }
    public int hitung()
    {
        return(spt+(spv*sks));
    }
} import java.io.BufferedReader;
import java.io.IOException;
import
java.io.InputStreamReader; public
class BayarSPP
{   public static void main (String [] args) throws
IOException {      String nama, nim;      int spt,spv,sks;

```

```

    SPP bayar = new SPP("Irfan","12.12.1234",950000,70000,24);

```

```

    BufferedReader br = new BufferedReader (new InputStreamReader(System.in));

```

```

    System.out.print("Nama \t\t: ");nama = br.readLine();
    System.out.print("NIM \t\t: ");nim = br.readLine();
    System.out.print("SPP Tetap \t: ");spt = Integer.parseInt(br.readLine());
    System.out.print("SPP Variabel \t: ");spv = Integer.parseInt(br.readLine());
    System.out.print("SKS \t\t: ");sks = Integer.parseInt(br.readLine());

```

```

    SPP bayar2 = new SPP (nama,nim,spt,spv,sks);

```

```

    System.out.println("\n\n\n----- PROGRAM PERHITUNGAN SPP
MANUAL-----\n");
    System.out.println("Nama \t\t: "+bayar.nama);
    System.out.println("NIM \t\t: " +bayar.nim);
    System.out.println("SPP Tetap \t: "+bayar.spt);

```

```

        System.out.println("SPP Variabel \t: "+bayar.spv);
        System.out.println("SKS \t\t: " +bayar.sks);
        System.out.println("Total SPP yang harus dibayarkan : Rp "+bayar.hitung()+"\n");
        System.out.println("----- TERIMAKASIH-----\n");

        System.out.println("\n----- PROGRAM PERHITUNGAN SPP
OTOMATIS ----- \n");
        System.out.println("Nama \t\t: "+bayar2.nama);
        System.out.println("NIM \t\t: " +bayar2.nim);
        System.out.println("SPP Tetap \t: "+bayar2.spt);
        System.out.println("SPP Variabel \t: "+bayar2.spv);
        System.out.println("SKS \t\t: " +bayar2.sks);
        System.out.println("Total SPP yang harus dibayarkan : Rp
"+bayar2.hitung()+"\n");
        System.out.println("----- TERIMAKASIH-----\n");
    }
}

```

Run program :


```
PROBLEMS 2 OUTPUT DEBUG CONSOLE TERMINAL PORTS
Run: BayarSPP + - [ ] [ ] ... v x

PS C:\bpo> & 'C:\Program Files\Eclipse Adoptium\jdk-21.0.3.9-hotspot\bin\java.exe' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\bpo\rizal\target\classes' 'com.example.BayarSPP'
Nama      : Rizal
NIM       : 20230810088
SPP Tetap : 1000000
SPP Variabel : 1200000
SKS       : 23

----- PROGRAM PERHITUNGAN SPP MANUAL-----

Nama      : Irfan
NIM       : 12.12.1234
SPP Tetap : 950000
SPP Variabel : 70000
SKS       : 24
Total SPP yang harus dibayarkan : Rp 2630000,-

----- TERIMA KASIH-----

----- PROGRAM PERHITUNGAN SPP OTOMATIS -----

Nama      : Rizal
NIM       : 20230810088
SPP Tetap : 1000000
SPP Variabel : 1200000
SKS       : 23
Total SPP yang harus dibayarkan : Rp 28600000,-

----- TERIMA KASIH-----

PS C:\bpo> 
```

PRAKTIKUM 5

Kode program :

```
class Mobil
{
    private String merk, type, warna;
    private double harga;

    public void setMerk(String merk){this.merk = merk;}
    public void setType(String type){this.type = type;}    public
    void setWarna(String colour){this.warna= colour;}    public
    void setHarga(double harga){this.harga = harga;}

    public String getMerk(){return merk;}
    public String getType(){return type;}    public
    String getWarna(){return warna;}
    public double getHarga(){return harga;}
```

```

        public double CashBack () {
            double cashback = 0.1 * getHarga();
            double total = getHarga () - cashback;
            return total;
        }
        public void Keterangan () {
            System.out.println("Harga Mobil After Dikurangi Cashback = "+CashBack());
        }
    }

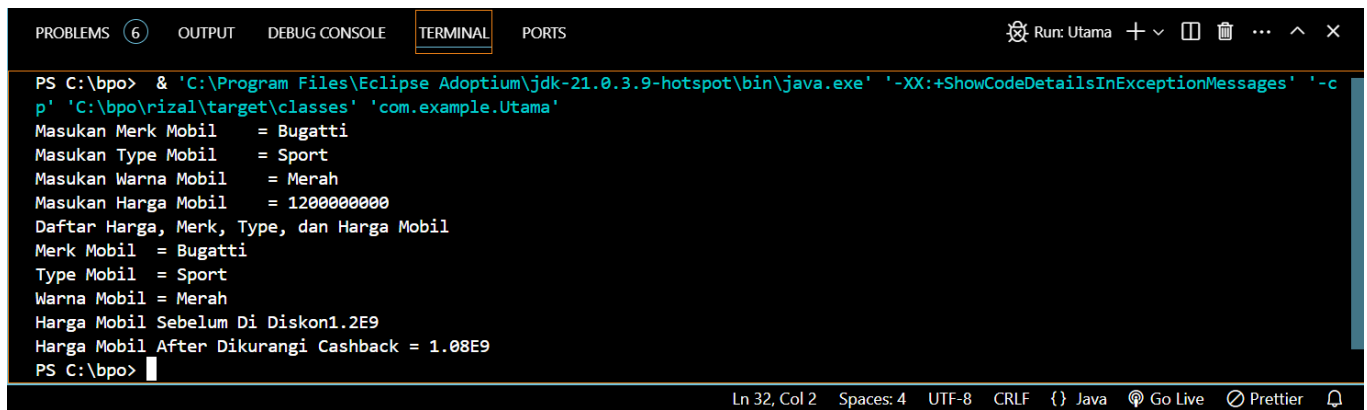
import java.io.*; class
Utama
{   public static void main (String args[]) throws
Exception
    {
        BufferedReader br = new BufferedReader (new InputStreamReader (System.in));
        Mobil mb = new Mobil ();

        System.out.print("Masukan Merk Mobil   = ");
        String merk_mobil = br.readLine();
        System.out.print("Masukan Type Mobil   = ");
        String type_mobil = br.readLine();
        System.out.print("Masukan Warna Mobil   = ");
        String warna_mobil = br.readLine();
        System.out.print("Masukan Harga Mobil   = ");
        double harga_mobil = Double.parseDouble(br.readLine());
        mb.setMerk(merk_mobil);      mb.setType(type_mobil);
        mb.setWarna(type_mobil);
        mb.setHarga(harga_mobil);

        System.out.println("Daftar Harga, Merk, Type, dan Harga Mobil");
        System.out.println("Merk Mobil = " +mb.getMerk());
        System.out.println("Type Mobil = " +mb.getType());
        System.out.println("Warna Mobil = " +mb.getWarna());
        System.out.println("Harga Mobil Sebelum Di Diskon" +mb.getHarga());
        mb.Keterangan();
    }
}

```

Run program :

The image shows a screenshot of the Eclipse IDE's terminal window. The terminal is running a Java program. The output shows the user inputting values for a car: Merk (Bugatti), Type (Sport), Warna (Merah), and Harga (1200000000). The program then displays the entered values and calculates the price after a 20% discount, resulting in 960,000,000. The terminal window has tabs for PROBLEMS, OUTPUT, DEBUG CONSOLE, TERMINAL, and PORTS. The TERMINAL tab is active. The command prompt shows the Java command being executed. The output is displayed in a monospaced font. The status bar at the bottom indicates the current line and column (Ln 32, Col 2) and the file encoding (UTF-8).

```
PS C:\bpo> & 'C:\Program Files\Eclipse Adoptium\jdk-21.0.3.9-hotspot\bin\java.exe' '-XX:+ShowCodeDetailsInExceptionMessages' '-c  
p' 'C:\bpo\rizal\target\classes' 'com.example.Utama'  
Masukan Merk Mobil      = Bugatti  
Masukan Type Mobil      = Sport  
Masukan Warna Mobil     = Merah  
Masukan Harga Mobil     = 1200000000  
Daftar Harga, Merk, Type, dan Harga Mobil  
Merk Mobil = Bugatti  
Type Mobil = Sport  
Warna Mobil = Merah  
Harga Mobil Sebelum Di Diskon1.2E9  
Harga Mobil After Dikurangi Cashback = 1.08E9  
PS C:\bpo>
```

POSTEST

1. Buatlah Program penerapan class, object, atribut, method seperti praktikum 3 dengan class/objek yang lain !

Kode program :

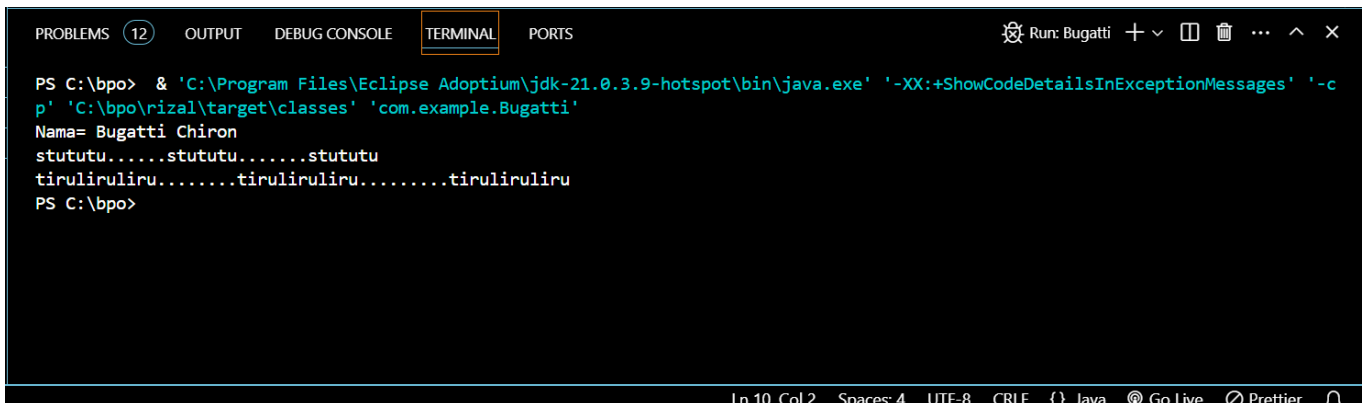
```
package com.example;  
  
public class Mobil {  
    public String mobil;  
  
    public Mobil(String n) {  
        this.mobil = n;  
    }  
  
    public String tampilkansuaramobil() {  
        return mobil;  
    }  
  
    public void suaramobiljalan() {  
        System.out.println("stututu.....stututu.....stututu");  
    }  
  
    public void suaramobilklakson() {  
        System.out.println("tiruliruliru.....tiruliruliru.....tiruliruliru");  
    }  
}  
  
package com.example;  
  
public class Bugatti {
```

```

public static void main(String[] args) {
    Mobil Bugatti = new Mobil("Bugatti Chiron");
    System.out.println("Nama= " + Bugatti.tampilKansuaraMobil());
    Bugatti.suaraMobilJalan();
    Bugatti.suaraMobilKlakson();
}
}

```

Run program :



```

PS C:\bpo> & 'C:\Program Files\Eclipse Adoptium\jdk-21.0.3.9-hotspot\bin\java.exe' '-XX:+ShowCodeDetailsInExceptionMessages' '-c
p' 'C:\bpo\rizal\target\classes' 'com.example.Bugatti'
Nama= Bugatti Chiron
stututu.....stututu.....stututu
tiruliruliru.....tiruliruliru.....tiruliruliru
PS C:\bpo>

```

TUGAS INDIVIDU

1. Buatlah Program Praktikum 3 dengan inputan data menggunakan JOptionPane !

Kode program :

```

package com.example;

import javax.swing.JOptionPane;

public class Manusia {
    public String nama;

    public Manusia(String n) {
        this.nama = n;
    }

    public String tampilkanNama() {
        return nama;
    }
}

```

```

public void makan() {
    System.out.println("Nyam... nyam... nyam...");
}

public void kerja() {
    System.out.println("Kerja...kerja...");
}

public static void main(String[] args) {
    String namaManusia = JOptionPane.showInputDialog("Masukkan nama:");
    Manusia manusia = new Manusia(namaManusia);
    JOptionPane.showMessageDialog(null, "Nama= " + manusia.tampilkanNama());
    manusia.makan();
    manusia.kerja();
}
}

```

Run program :

```

1 package com.example;
2
3 import javax.swing.JOptionPane;
4
5 public class Manusia {
6     public String nama;
7
8     public Manusia(String n) {
9         this.nama = n;
10    }
11
12    public String tampilkanNama() {
13        return nama;
14    }
15
16    public void makan() {
17        System.out.println("Nyam... nyam... nyam...");
18    }
19    public void kerja() {
20        System.out.println("Kerja...kerja...");
21    }
22 }

```

Input

Masukkan nama:

Jaka

OK Cancel

```

PS C:\bpo> & 'C:\Program Files\Eclipse Adoptium\jdk-21.0.3-hotspot\bin\java.exe' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\bpo\rizal\target\classes' 'com.example.Manusia'
Nyam... nyam... nyam...
Kerja...kerja...
PS C:\bpo> ^C
PS C:\bpo>
PS C:\bpo> c:: cd 'c:\bpo'; & 'C:\Program Files\Eclipse Adoptium\jdk-21.0.3-hotspot\bin\java.exe' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\bpo\rizal\target\classes' 'com.example.Manusia'

```

Ln 1, Col 21 Spaces: 4 UTF-8 CRLF {} Java Go Live Prettier

