

**PRAKTIKUM**  
**PEMROGRAMAN BERORIENTASI OBJEK**  
**UAS**



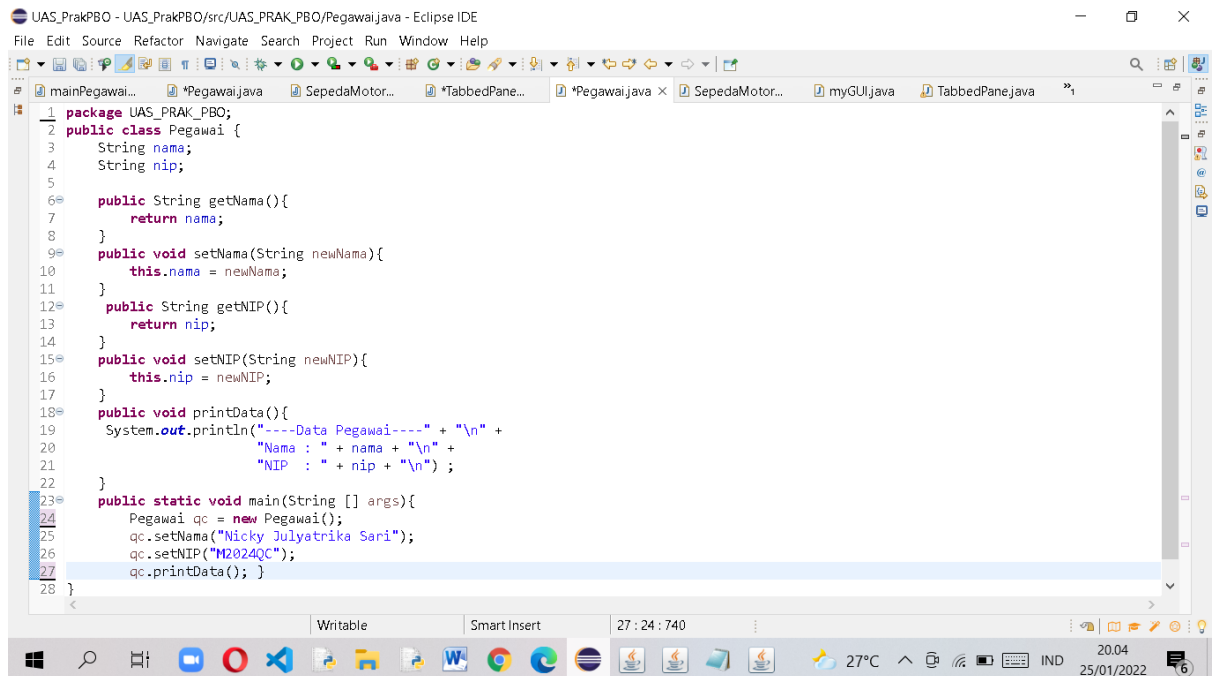
**Nama : NICKY JULYATRIKA SARI**

**NIM : L200200101**

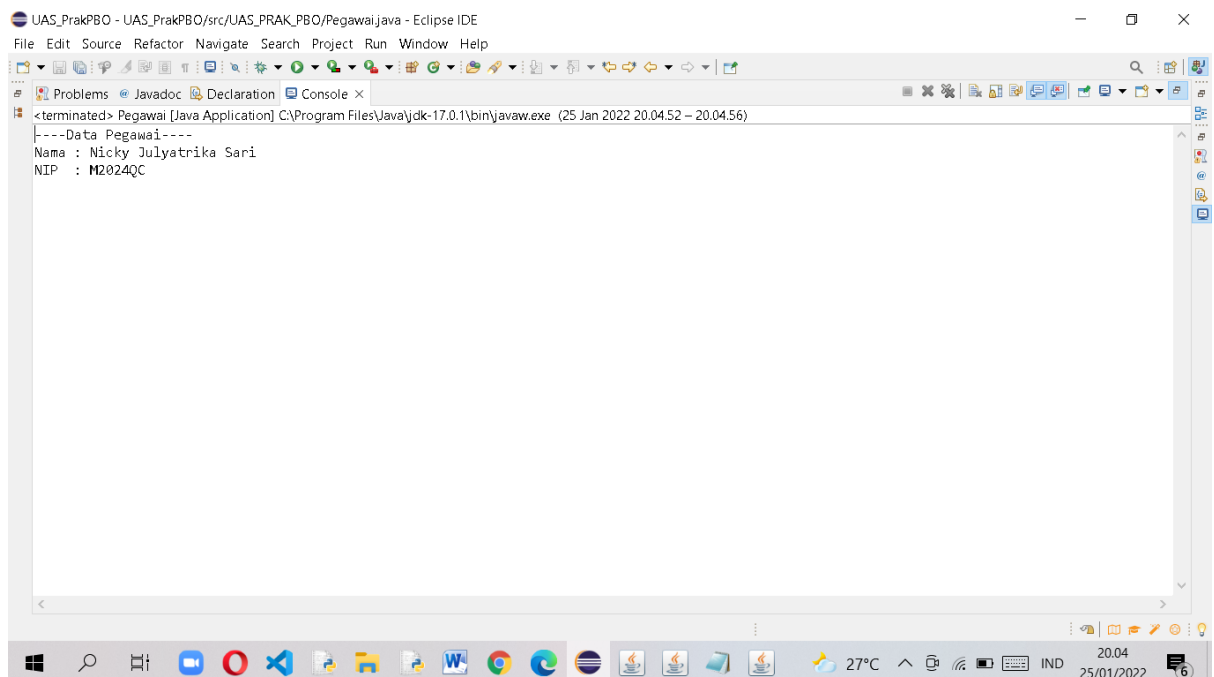
**PROGRAM STUDI**  
**INFORMATIKA**  
**FAKULTAS KOMUNIKASI DAN INFORMATIKA**  
**UNIVERSITAS MUHAMMADIYAH SURAKARTA**  
**TAHUN 2021/2022**

## 1. Soal nomor 1

- Buatlah program berdasarkan UML di lembar soal! (Package bebas – tidak dipermasalahkan dalam soal ini)
- Tambahkan dua buah constructor sebagai implementasi konsep polymorphism
  - Screenshoot kode dan outputnya



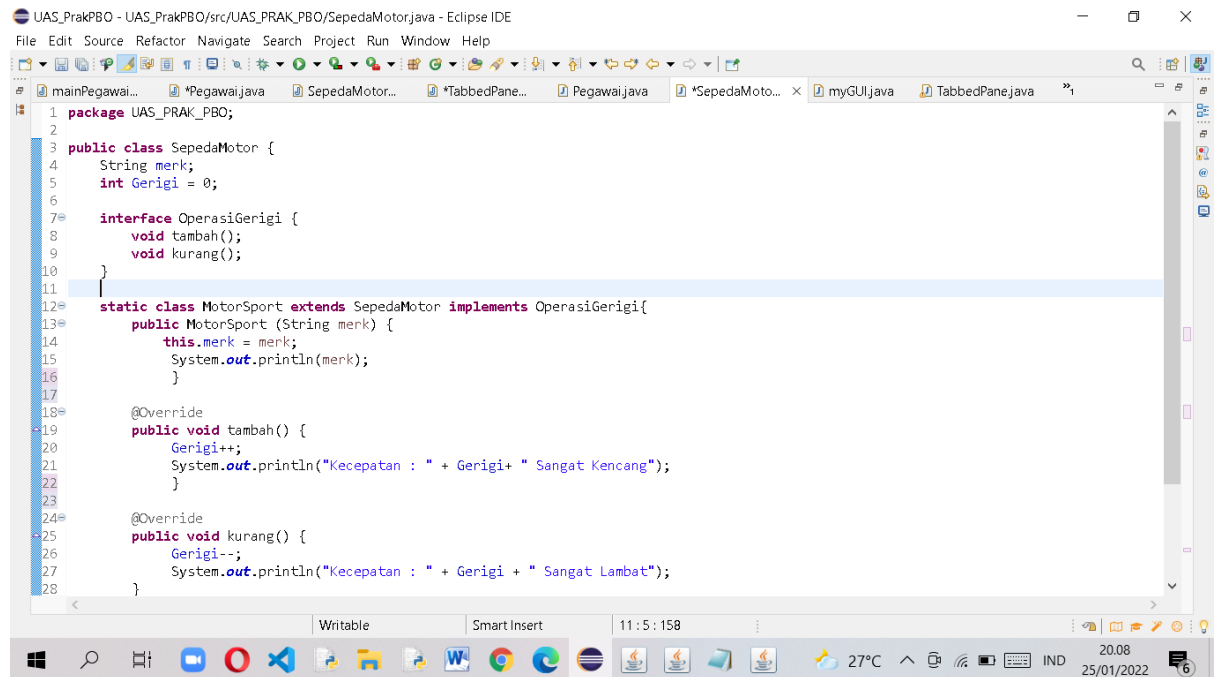
```
1 package UAS_PRAK_PBO;
2 public class Pegawai {
3     String nama;
4     String nip;
5
6     public String getName(){
7         return nama;
8     }
9     public void setName(String newName){
10        this.nama = newName;
11    }
12    public String getNIP(){
13        return nip;
14    }
15    public void setNIP(String newNIP){
16        this.nip = newNIP;
17    }
18    public void printData(){
19        System.out.println("----Data Pegawai----" + "\n" +
20            "Nama : " + nama + "\n" +
21            "NIP : " + nip + "\n");
22    }
23    public static void main(String [] args){
24        Pegawai qc = new Pegawai();
25        qc.setName("Nicky Juliyatrika Sari");
26        qc.setNIP("M2024QC");
27        qc.printData();
28    }
29 }
```



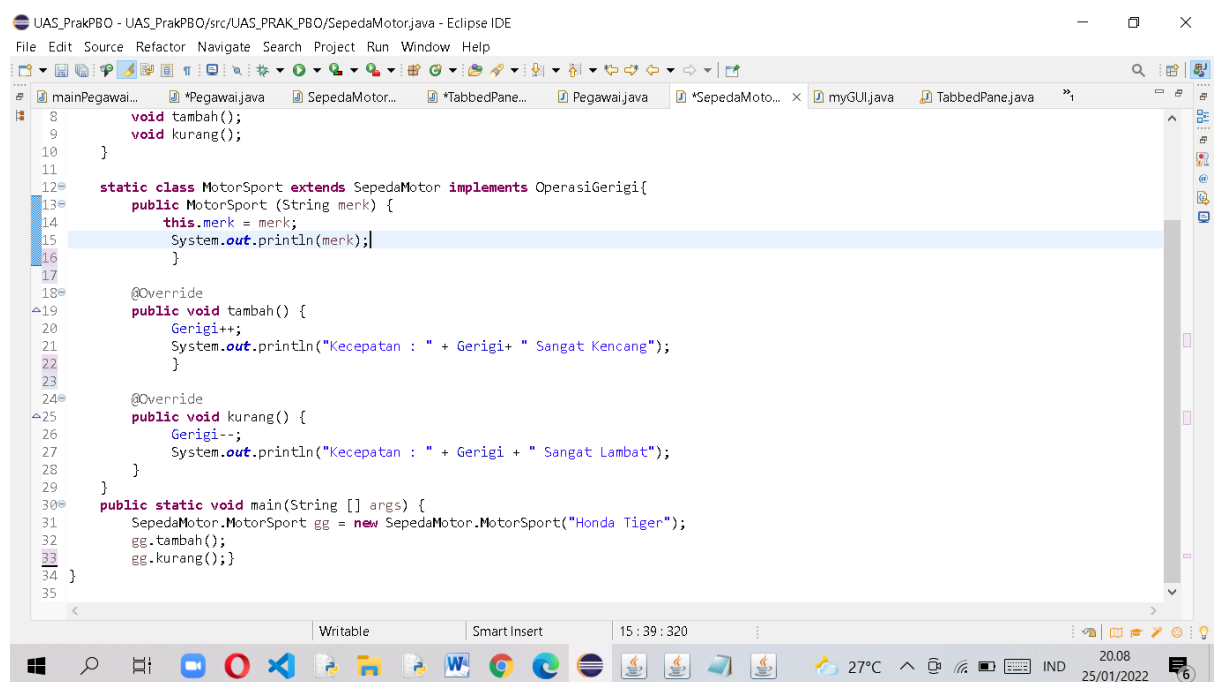
```
<terminated> Pegawai [Java Application] C:\Program Files\Java\jdk-17.0.1\bin\javaw.exe (25 Jan 2022 20.04.52 - 20.04.56)
----Data Pegawai----
Nama : Nicky Juliyatrika Sari
NIP : M2024QC
```

## 2. Lengkapilah kode programnya sesuai informasi komentar di dalam program (poin a hingga e)

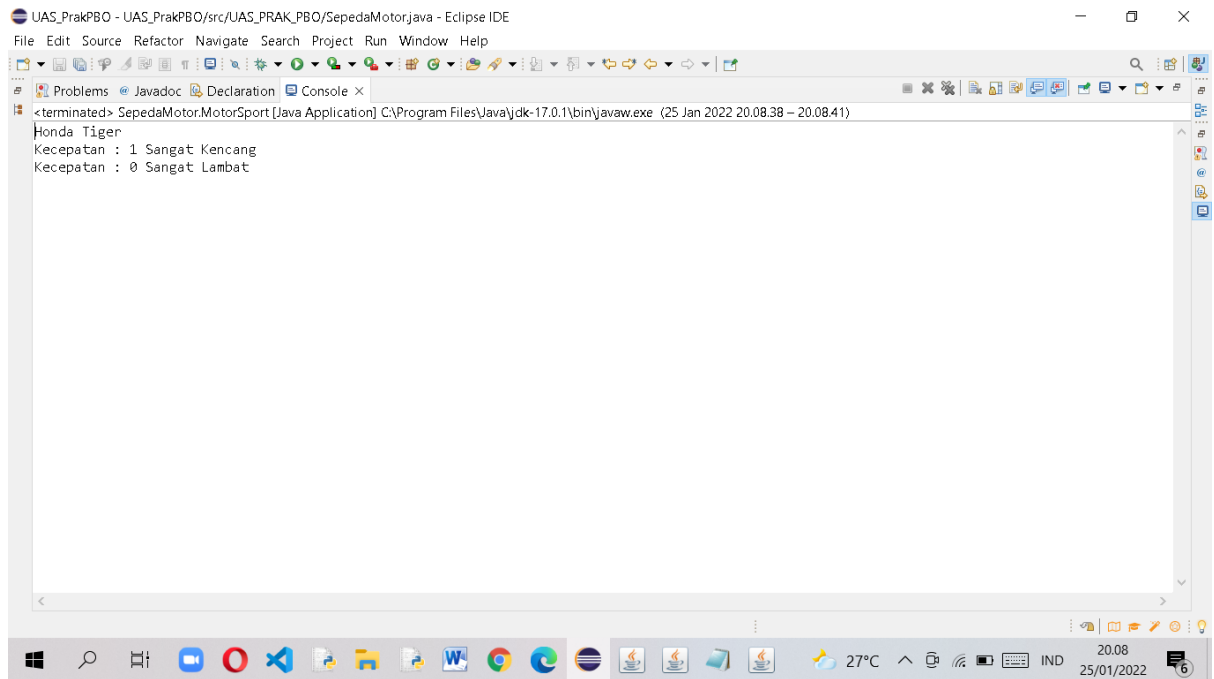
- Screenshot kode dan outputnya



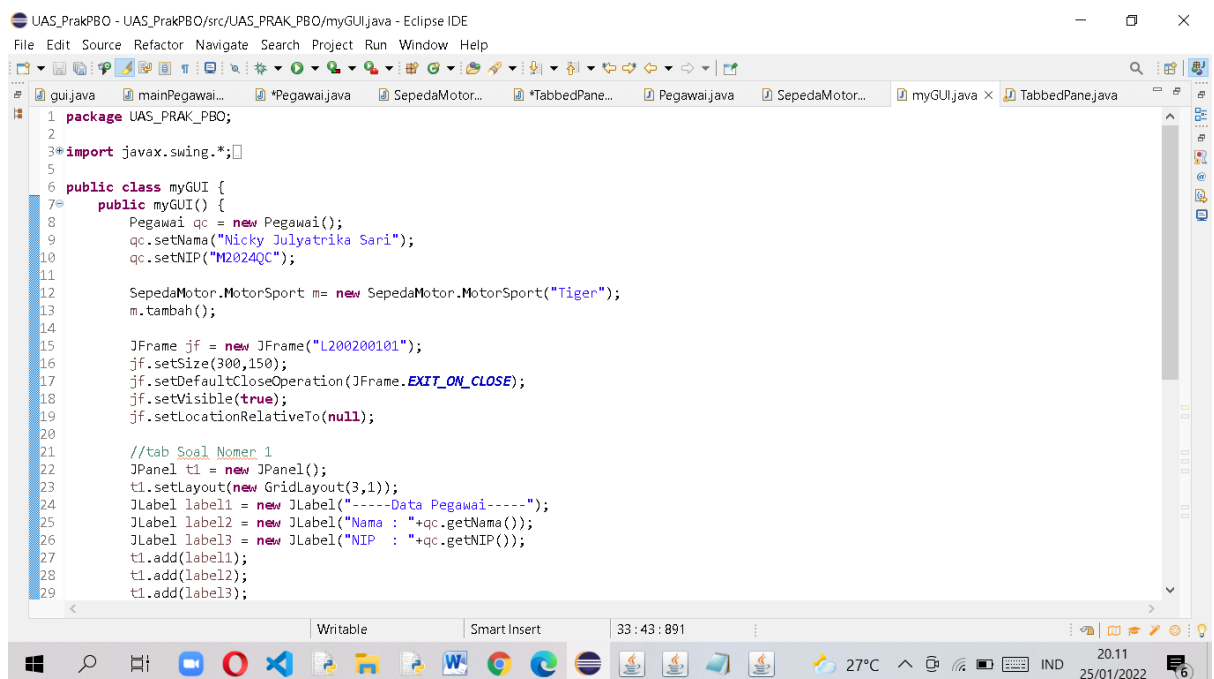
```
1 package UAS_PRAK_PBO;
2
3 public class SepedaMotor {
4     String merk;
5     int Gerigi = 0;
6
7     interface OperasiGerigi {
8         void tambah();
9         void kurang();
10    }
11
12    static class MotorSport extends SepedaMotor implements OperasiGerigi{
13        public MotorSport (String merk) {
14            this.merk = merk;
15            System.out.println(merk);
16        }
17
18        @Override
19        public void tambah() {
20            Gerigi++;
21            System.out.println("Kecepatan : " + Gerigi+ " Sangat Kencang");
22        }
23
24        @Override
25        public void kurang() {
26            Gerigi--;
27            System.out.println("Kecepatan : " + Gerigi + " Sangat Lambat");
28        }
29    }
30
31    public static void main(String [] args) {
32        SepedaMotor.MotorSport gg = new SepedaMotor.MotorSport("Honda Tiger");
33        gg.tambah();
34        gg.kurang();
35    }
36 }
```

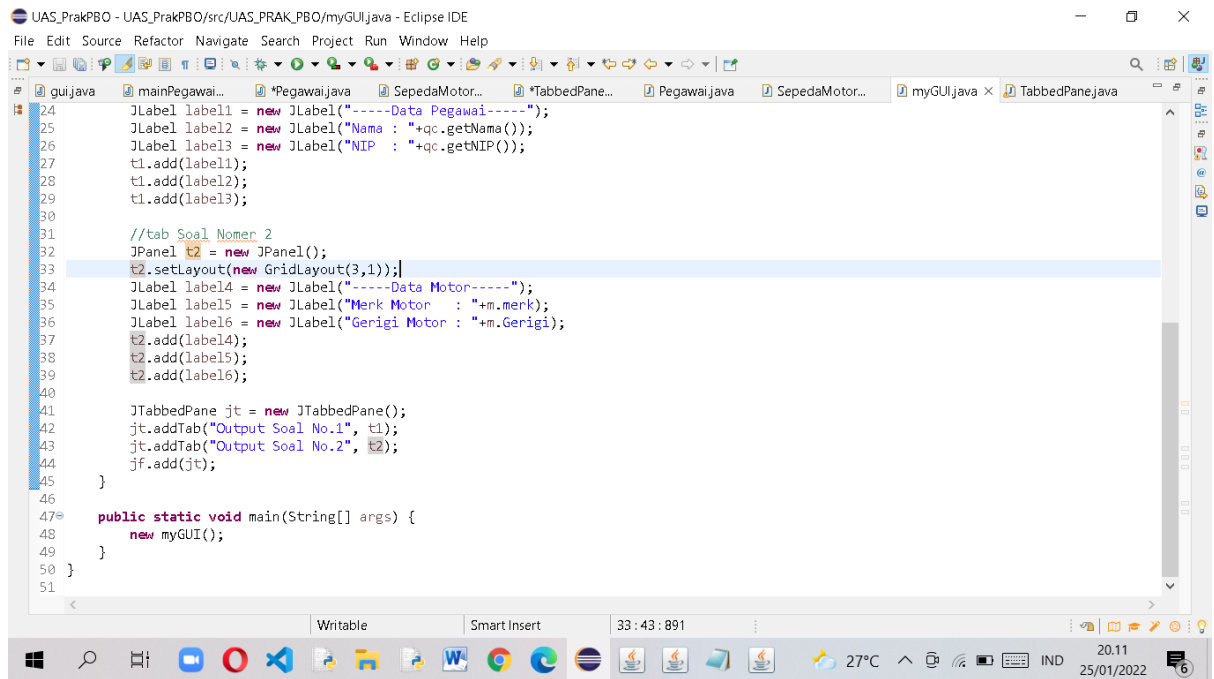


```
8     void tambah();
9     void kurang();
10 }
11
12 static class MotorSport extends SepedaMotor implements OperasiGerigi{
13     public MotorSport (String merk) {
14         this.merk = merk;
15         System.out.println(merk);
16     }
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18     @Override
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24     @Override
25     public void kurang() {
26         Gerigi--;
27         System.out.println("Kecepatan : " + Gerigi + " Sangat Lambat");
28     }
29 }
30
31 public static void main(String [] args) {
32     SepedaMotor.MotorSport gg = new SepedaMotor.MotorSport("Honda Tiger");
33     gg.tambah();
34     gg.kurang();
35 }
```



3. Berdasarkan soal No.1 dan No.2, tampilkan output program masing masing menggunakan JTabbedPane seperti ilustrasi berikut
  - a. Tambahkan judul frame dengan NIM Anda masing-masing!
    - Screenshot kode dan outputnya



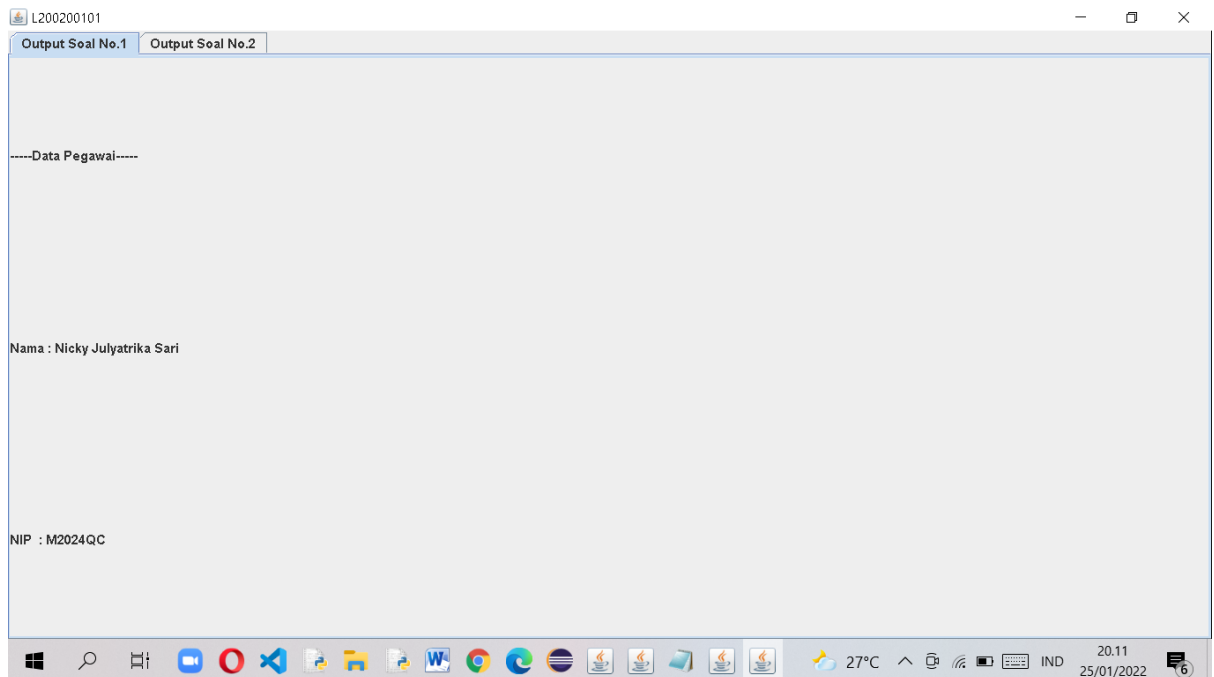


```
UAS_PrakPBO - UAS_PrakPBO/src/UAS_PRAK_PBO/myGUI.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help

gui.java  mainPegawai...  *Pegawai.java  SepedaMotor...  *TabbedPane...  Pegawai.java  SepedaMotor...  myGUI.java x  TabbedPane.java

24 JLabel label1 = new JLabel("-----Data Pegawai-----");
25 JLabel label2 = new JLabel("Nama : "+qc.getName());
26 JLabel label3 = new JLabel("NIP : "+qc.getNIP());
27 t1.add(label1);
28 t1.add(label2);
29 t1.add(label3);
30
31 //tab Soal Nomor 2
32 JPanel t2 = new JPanel();
33 t2.setLayout(new GridLayout(3,1));
34 JLabel label4 = new JLabel("-----Data Motor-----");
35 JLabel label5 = new JLabel("Merk Motor : "+m.merk);
36 JLabel label6 = new JLabel("Gerigi Motor : "+m.Gerigi);
37 t2.add(label4);
38 t2.add(label5);
39 t2.add(label6);
40
41 JTabbedPane jt = new JTabbedPane();
42 jt.addTab("Output Soal No.1", t1);
43 jt.addTab("Output Soal No.2", t2);
44 jf.add(jt);
45 }
46
47 public static void main(String[] args) {
48     new myGUI();
49 }
50 }
51
```

b. Panel tab 1 berisi output program No.1



c. Panel tab 2 berisi output program No.2

