Nama   : Mahesa Alghifari

Kelas   : 212310006

Kelas   : 21 – TI – PA2

Source code **Biodata.java**

```java
import javax.swing.JOptionPane;

public class Biodata {

        private String fullName, alamat;
        private int usia;

        void setData(String valNama, int valUsia, String valAlamat) {
                fullName = valNama;
                usia = valUsia;
                alamat = valAlamat;
        }

        void getData() {
                String output = "Biodata " + fullName + "\n\n"
                                        + "Nama : " + fullName + "\n"
                                        + "Usia : " + usia + "\n"
                                        + "Alamat : " + alamat + "\n";

                JOptionPane.showMessageDialog(null, output, "Data Biodata",
JOptionPane.INFORMATION_MESSAGE);
        }
}
```

Source code **Latihan02**

```java
import javax.swing.JOptionPane;

public class Latihan02 {

    public static void main(String[] args) {
        Biodata bio = new Biodata();

        String nama = JOptionPane.showInputDialog(null, "Fullname : ", "Form Nama",
JOptionPane.QUESTION_MESSAGE);
        String usia = JOptionPane.showInputDialog(null, "Usia : ", "Form Usia",
JOptionPane.QUESTION_MESSAGE);
        String alamat = JOptionPane.showInputDialog(null, "Alamat : ", "Form Alamat",
JOptionPane.QUESTION_MESSAGE);

        int pUsia = Integer.parseInt(usia);

        bio.setData(nama, pUsia, alamat);
        bio.getData();
    }
}
```
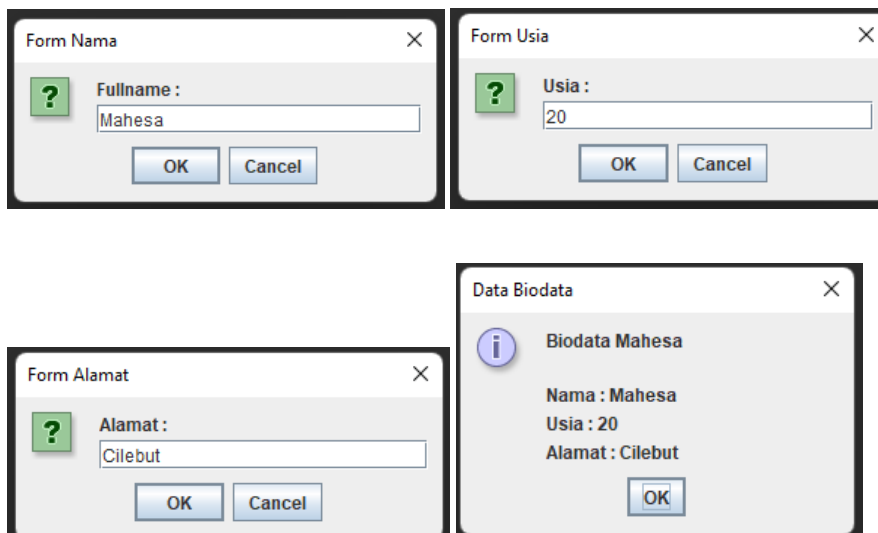
Hasil Program

Source code **Latihan03**

```java
import javax.swing.JOptionPane;

public class Latihan03 {

        public static void main(String[] args) {
                Biodata bio = new Biodata();

                final String WARN = "PERINGATAN!";

                String nama = JOptionPane.showInputDialog(null, "Fullname : ", "Form Nama",
JOptionPane.QUESTION_MESSAGE);

                if(nama.isEmpty()) {
                        JOptionPane.showMessageDialog(null, "Field Form Nama tidak boleh kosong!",
WARN, JOptionPane.WARNING_MESSAGE);
                        System.exit(0);
                }

                String usia = JOptionPane.showInputDialog(null, "Usia : ", "Form Usia",
JOptionPane.QUESTION_MESSAGE);
                final String REG_NUMERIK = "[0-9]+";

                if(usia.isEmpty()) {
                        JOptionPane.showMessageDialog(null, "Field Form Usia tidak boleh kosong!", WARN,
JOptionPane.WARNING_MESSAGE);
                        } else if(!usia.matches(REG_NUMERIK)) {
                                JOptionPane.showMessageDialog(null, "Isian Form Usia harus numerik!",
WARN, JOptionPane.WARNING_MESSAGE);
                        }

                String alamat = JOptionPane.showInputDialog(null, "Alamat : ", "Form Alamat",
JOptionPane.QUESTION_MESSAGE);

                if(alamat.isEmpty()) {
```

```
                    JOptionPane.showMessageDialog(null, "Field Form Alamat tidak boleh kosong!",
WARN, JOptionPane.WARNING_MESSAGE);
                    } else if(alamat.length() < 10) {
                            JOptionPane.showMessageDialog(null, "Masukkan alamat minimum 10
karakter!", WARN, JOptionPane.WARNING_MESSAGE);
                    }

            int pUsia = Integer.parseInt(usia);

            bio.setData(nama, pUsia, alamat);
            bio.getData();
        }
}
```
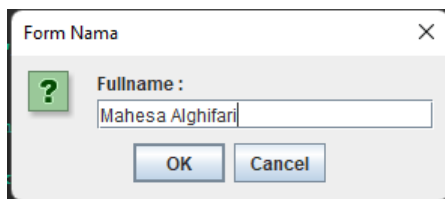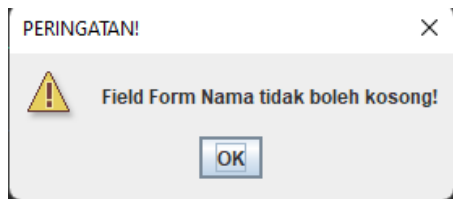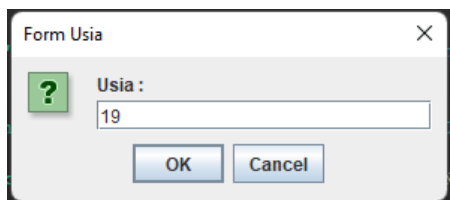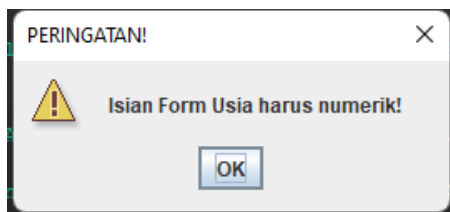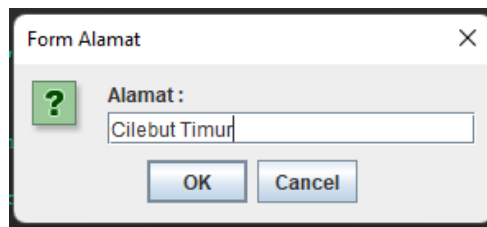
Hasil Program

jika memiliki nilai kosong maka
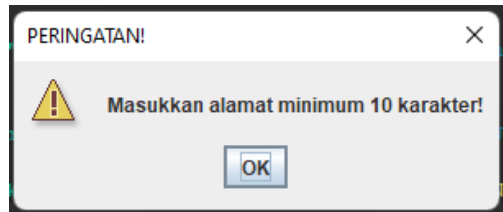
Jika nilai bukan numerik maka
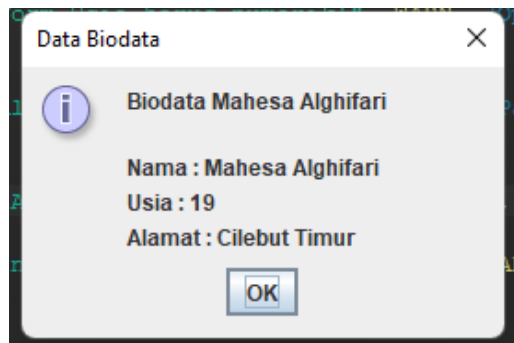
Form Alamat   ✕

?   **Alamat :**

     Cilebut Timur

       OK   Cancel

jika value yang diisi tidak memiliki nilai minimum batas character sebanyak 10, maka

PERINGATAN!   ✕

⚠   **Masukkan alamat minimum 10 karakter!**

      OK

Data Biodata   ✕

ⓘ   **Biodata Mahesa Alghifari**

     Nama : Mahesa Alghifari
     Usia : 19
     Alamat : Cilebut Timur

      OK

Source code **Latihan04**

```java
import javax.swing.JOptionPane;

public class Latihan04 {

    public static void main(String[] args) {
        Biodata bio = new Biodata();

        final String WARN = "PERINGATAN!";
        boolean isLanjut = true;

        while(isLanjut) {
            String nama = JOptionPane.showInputDialog(null, "Fullname : ", "Form Nama",
JOptionPane.QUESTION_MESSAGE);

            if(nama.isEmpty()) {
                JOptionPane.showMessageDialog(null, "Field Form Nama tidak boleh
kosong!", WARN, JOptionPane.WARNING_MESSAGE);
                System.exit(0);
            }

            String usia = JOptionPane.showInputDialog(null, "Usia : ", "Form Usia",
JOptionPane.QUESTION_MESSAGE);
            final String REG_NUMERIK = "[0-9]+";

            if(usia.isEmpty()) {
                JOptionPane.showMessageDialog(null, "Field Form Usia tidak boleh kosong!",
WARN, JOptionPane.WARNING_MESSAGE);
            } else if(!usia.matches(REG_NUMERIK)) {
                JOptionPane.showMessageDialog(null, "Isian Form Usia harus
numerik!", WARN, JOptionPane.WARNING_MESSAGE);
                System.exit(0);
            }

            String alamat = JOptionPane.showInputDialog(null, "Alamat : ", "Form Alamat",
JOptionPane.QUESTION_MESSAGE);
```

```java
                        if(alamat.isEmpty()) {
                                JOptionPane.showMessageDialog(null, "Field Form Alamat tidak boleh
kosong!", WARN, JOptionPane.WARNING_MESSAGE);
                        } else if(alamat.length() < 10) {
                                JOptionPane.showMessageDialog(null, "Masukkan alamat minimum
10 karakter!", WARN, JOptionPane.WARNING_MESSAGE);
                        }

                    int pUsia = Integer.parseInt(usia);

                    bio.setData(nama, pUsia, alamat);
                    bio.getData();

                    int keluar = JOptionPane.showConfirmDialog(null, "Apakah Anda ingin keluar?",
"Keluar?", JOptionPane.YES_NO_OPTION);

                    if(keluar == JOptionPane.YES_OPTION) {
                        isLanjut = false;
                    } else {
                            isLanjut = true;
                    }
            }
        }
}
```

Hasil Program

Screenshot 1 — Eclipse IDE (Latihan04.java) with "Form Nama" dialog:

```java
                JOptionPane.showMessageDialog(null, "Field Form Nama tidak boleh kosong!", WARN, JOptionPane.WARNING_MESSAGE);
                System.exit(0);
        }

        String usia = JOptionPane.showInputDialog(null, "Usia : ", "Form Usia", JOptionPane.QUESTION_MESSAGE);
        final String REG_NUMERIK = "[0-9]+";

        if(usia.isEmpty()) {
                JOptionPane.showMessageDialog(null, "Field Form Usia tidak boleh kosong!", WARN, JOptionPane.WARNING_MESSAGE);
                } else if(!usia.matches(REG_NUMERIK)) {
                        JOptionPane.showMessageDialog(null, "Isian Form Usia harus numerik!", WARN, JOptionPane.WARNING_MESSAGE);
                        System.exit(0);
                }

        String alamat = JOptionPane.showInputDialog(null, "Alamat : ", "Form Alamat", JOptionPane.QUESTION_MESSAGE);

        if(alamat.isEmpty()) {
                JOptionPane.showMessageDialog(null, "Field Form Alamat tidak boleh kosong!", WARN, JOptionPane.WARNING_MESSAGE);
                } else if(alamat.length() < 10) {
                        JOptionPane.showMessageDialog(null, "Masukkan alamat minimum 10 karakter!", WARN, JOptionPane.WARNING_MESSAGE);
                }

        int pUsia = Integer.parseInt(usia);

        bio.setData(nama, pUsia, alamat);
        bio.getData();

        int keluar = JOptionPane.showConfirmDialog(null, ... ?", JOptionPane.YES_NO_OPTION);

        if(keluar == JOptionPane.YES_OPTION) {
                isLanjut = false;
                } else {
                        isLanjut = true;
                }
        }
```
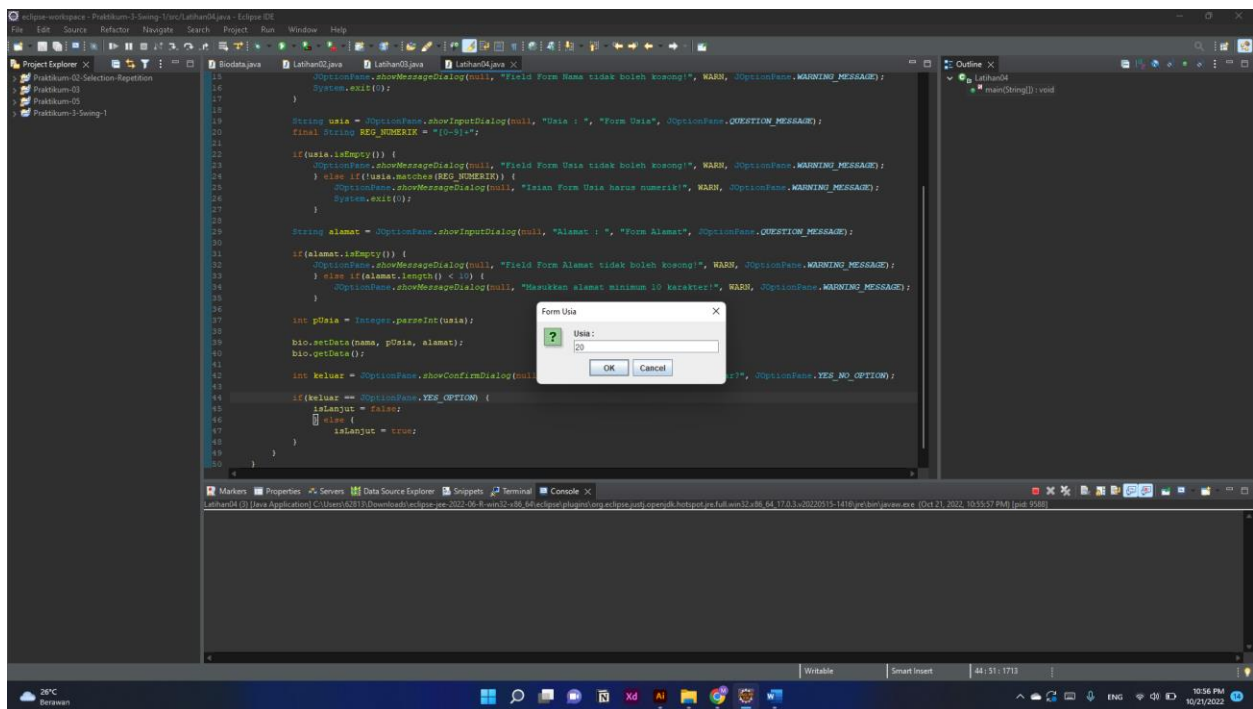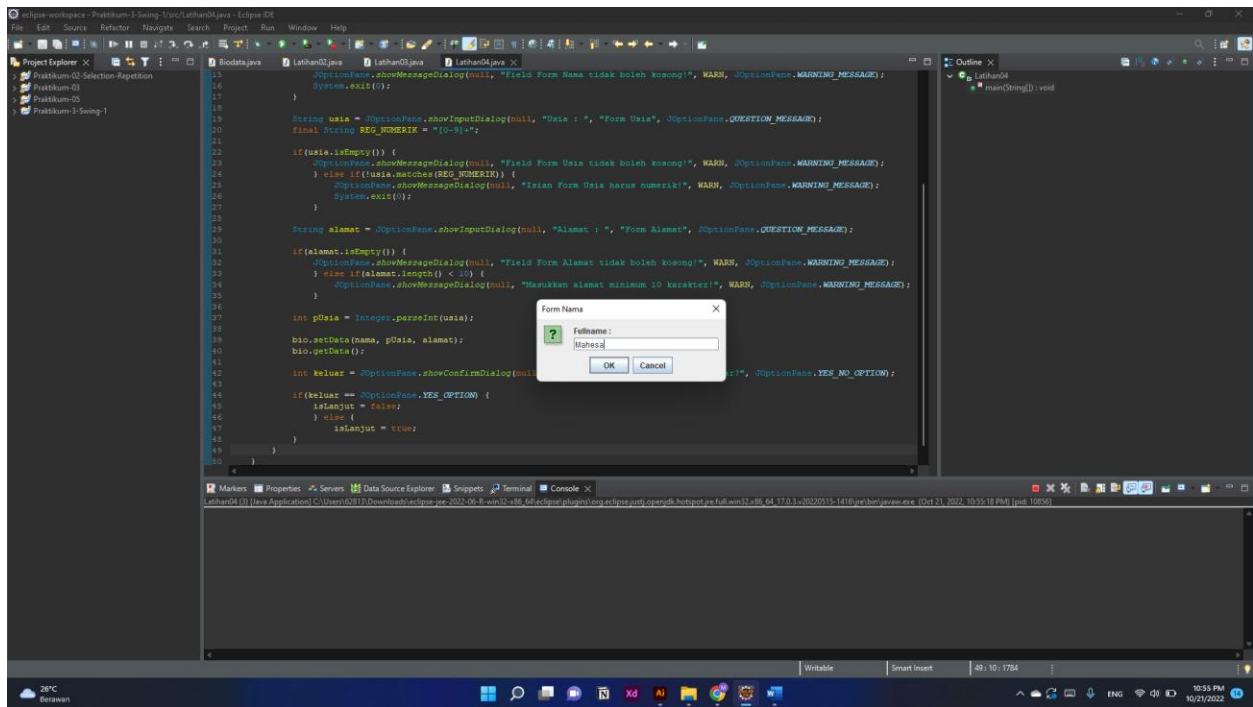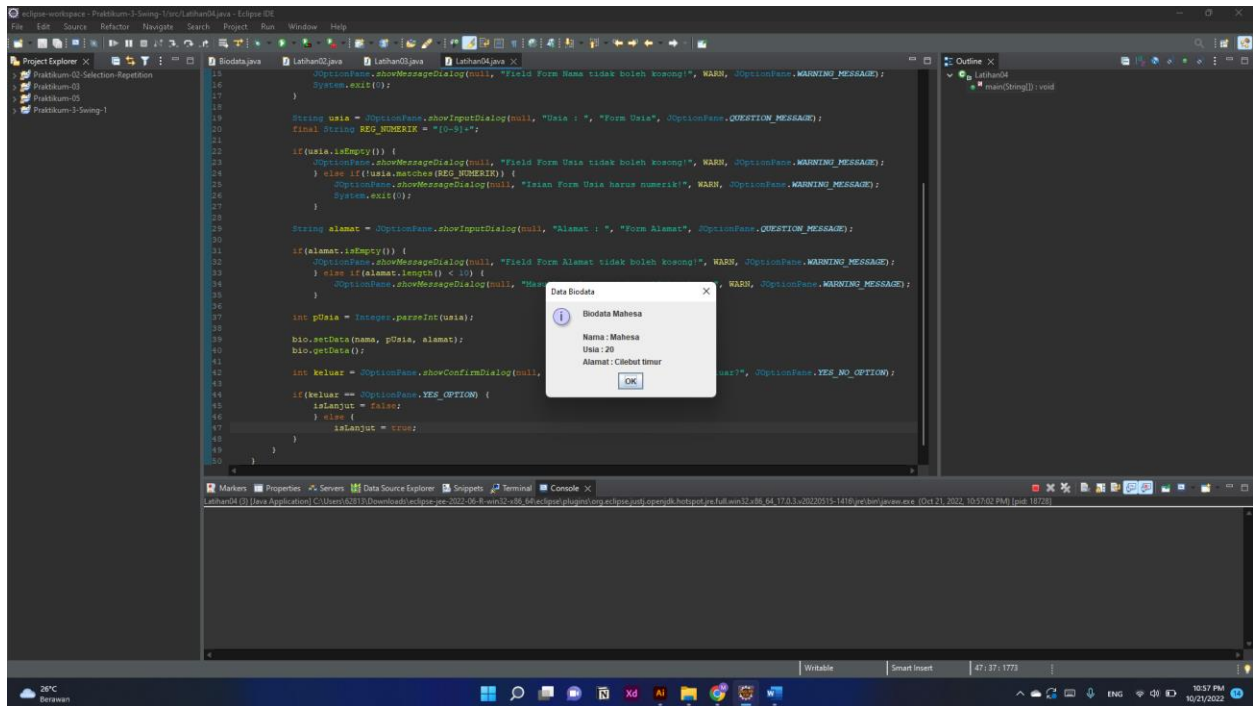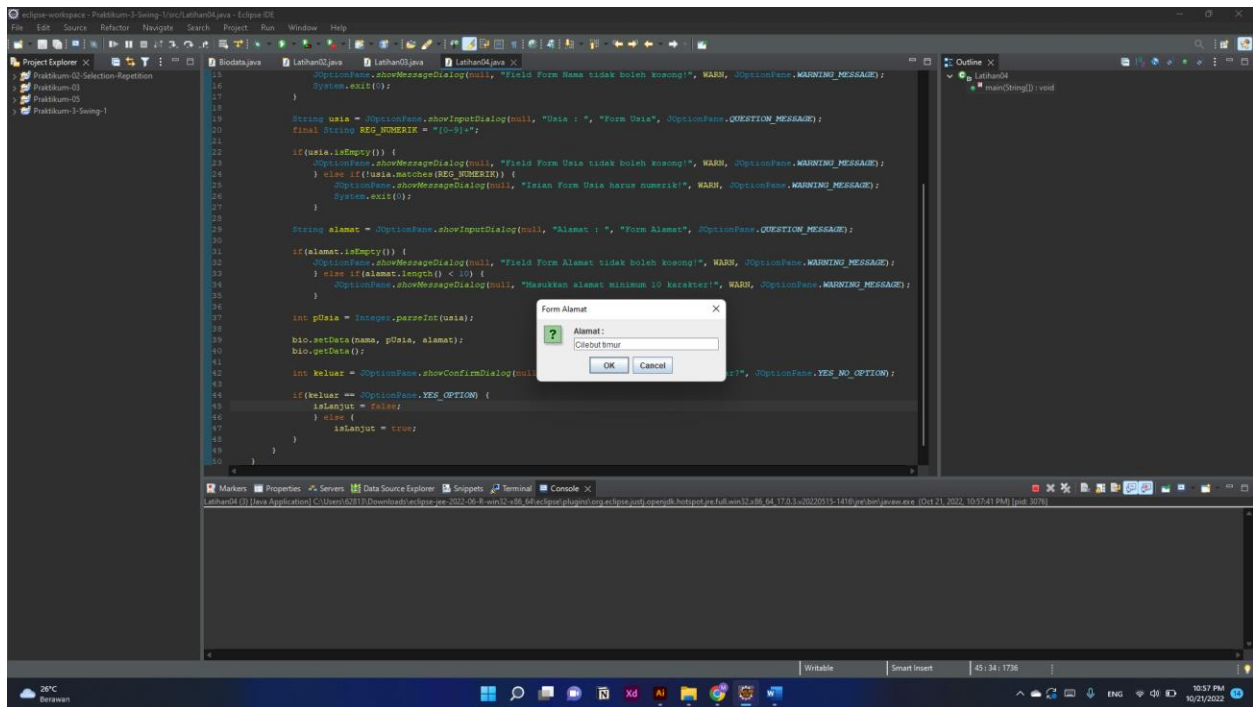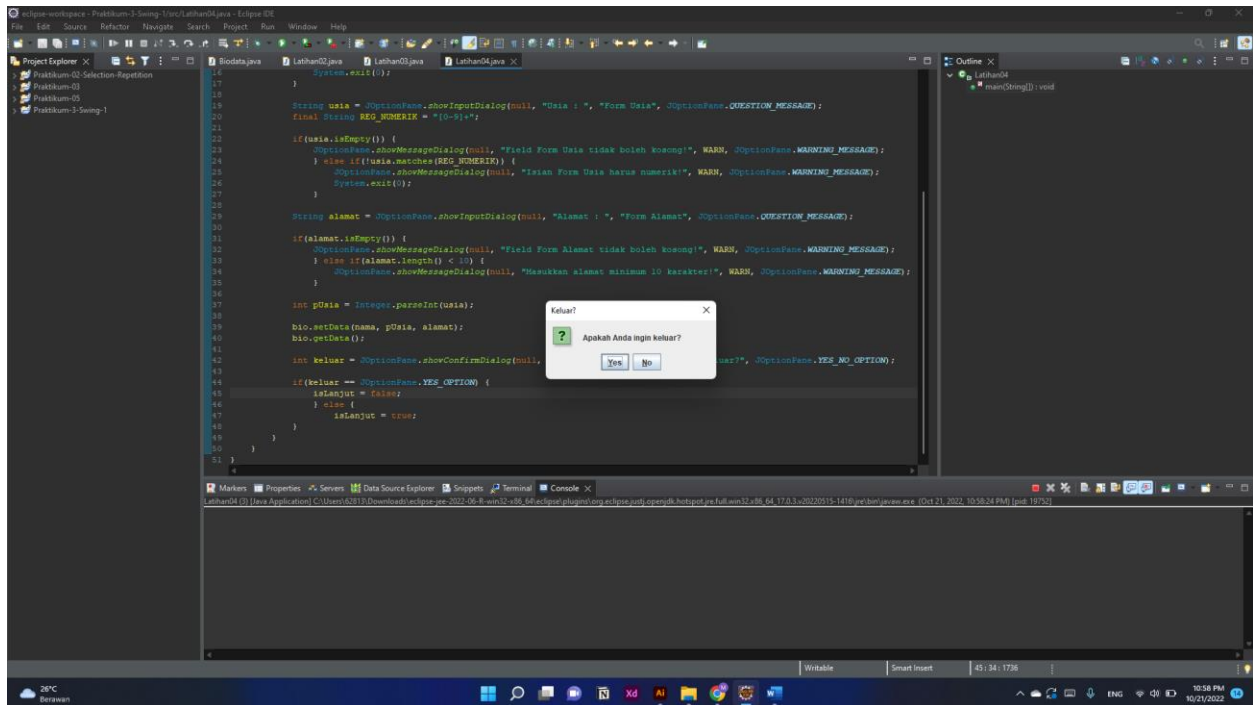
Dialog "Form Nama": Fullname : Mahesa [OK] [Cancel]

Screenshot 2 — same code with "Form Usia" dialog:

Dialog "Form Usia": Usia : 20 [OK] [Cancel]

No 5

Biodata

Fullname : string
Alamat : string
Age : integer

---

setFullname (void) : string Fullname
setAlamat (void) : string Alamat
setAge (void) : int Age

---

getFullname (void)
getAlamat (void)
getAge (void)

Latihan04

Nama : string
Alamat : string
Usia : integer
Age : integer

---

outputNama : string
outputAlamat : string
outputAge : integer

---

keluar : integer

---

main()
bio(Biodata)