

# RADIO BUTTON

- ❑ JRadioButton sınıfı, AbstractButton sınıfından türetilen alt sınıflardan biridir ve tek seçimli düğmeler sağlar.
- ❑ Swing, tek seçimli düğmeleri JRadioButton ve ButtonGroup sınıflarıyla destekler ve ayrıca menü-lerde de tek seçimli düğmeler kullanılabilir.
- ❑ Menülerde tek seçimli düğmeler kullanmak için JRadioButtonMenu sınıfı kullanılır.
- ❑ Tek seçimli düğmeler çoklu seçim düğmelerine benzerler; ancak onlardan farklı olarak yalnızca gruptan bir eleman seçilebilir.

Project Explorer showing file structure:

- NewJFrame2.java
- Test Packages
- Libraries
- Test Libraries
- JavaApplication 130
  - Source Packages
  - javaapplication 130
  - JavaApplication 130.java
- Test Packages
- Libraries
- Test Libraries
- JavaApplication 131
  - Source Packages
  - javaapplication 131
  - JavaApplication 131.java
  - NewJFrame.java

Metre [JRadioButton] - N... x

- Form NewJFrame
  - Other Components
    - buttonGroup1 [ButtonGroup]
  - [JFrame]
    - jPanel1 [JPanel]
      - AbsoluteLayout
      - Hesap [JButton]
      - Uzun [JTextField]
      - Genis [JTextField]
      - Topla [JTextField]
      - label jLabel1 [JLabel]
      - label jLabel2 [JLabel]
      - label jLabel3 [JLabel]
      - Metre [JRadioButton]
      - Desimetre [JRadioButt]
      - Santimetre [JRadioButt]

The GUI consists of a green rectangular area containing:
 

- Two text input fields labeled 'Uzunluk' and 'Genişlik'.
- A 'Hesapla' button.
- A vertical group of four radio buttons labeled 'Metrekare', 'Desimetre', 'Santimetre', and 'Milimetre'.

Metre [JRadioButton] - Properties

Property	Value
Accessible Description	
Accessible Name	Metrekare
Accessible Parent	jPanel1
action	<none>
actionCommand	Metrekare
alignmentX	0.0
alignmentY	0.5
autoscrolls	<input type="checkbox"/>
background	<input type="checkbox"/> [240,240,240]
baselineResizeBehavior	CENTER_OFFSET
border	[CompoundBorderUIResource]
borderPainted	<input type="checkbox"/>
<b>buttonGroup</b>	<b>buttonGroup1</b>
componentPopupMenu	<none>
contentAreaFilled	buttonGroup1
cursor	Default Cursor
debugGraphicsOptions	NO_CHANGES
disabledIcon	<none>
disabledSelectedIcon	<none>
displayedMnemonicIndex	-1
doubleBuffered	<input type="checkbox"/>
enabled	<input checked="" type="checkbox"/>

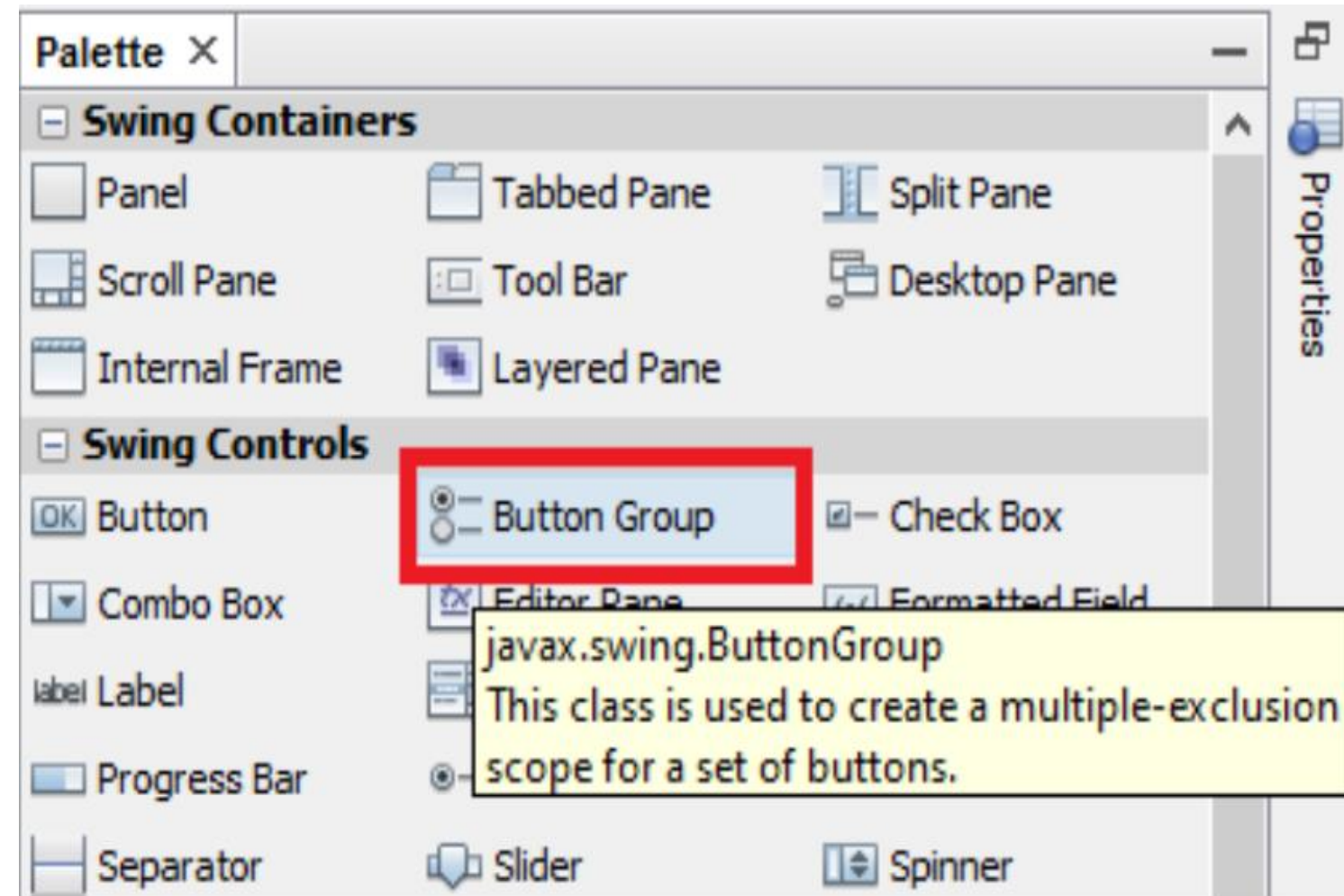
**buttonGroup**  
Group of buttons in which this button belongs

Close Help

Output - JavaApplication131 (run) x

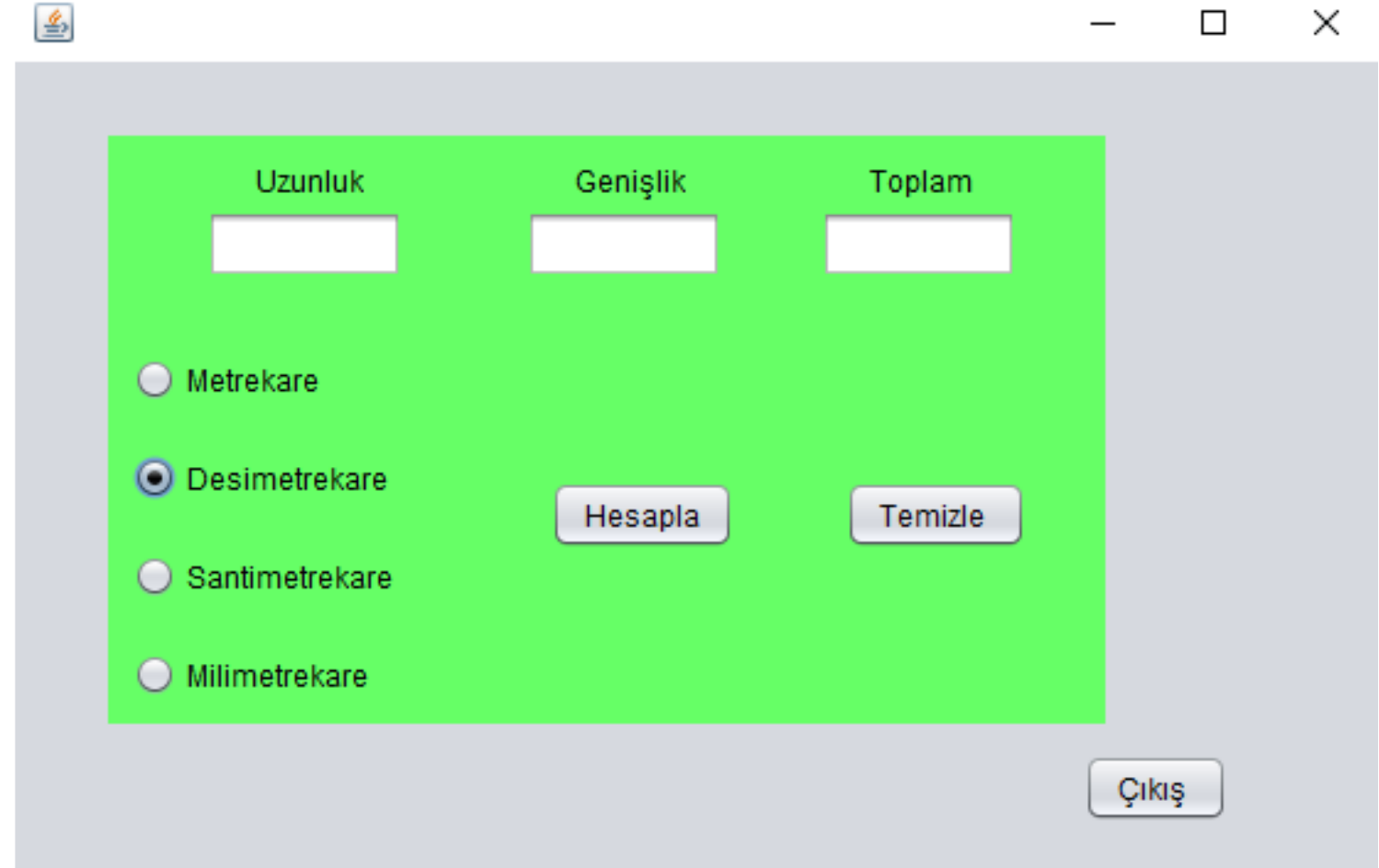
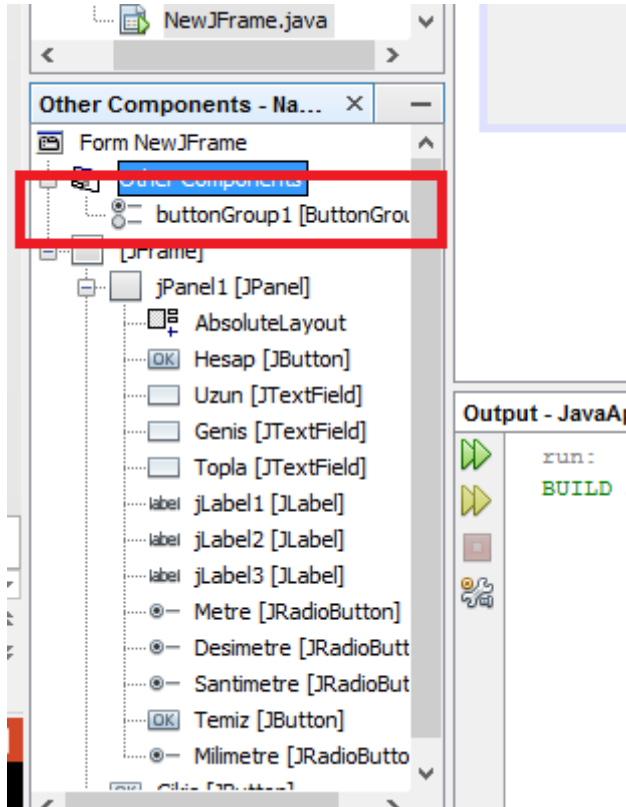
```
run:
BUILD SUCCESSFUL (total time: 1 minute 57 seconds)
```

# RADIO BUTTON



\*\*\*\*\*Button Group yapılmazsa radio düğmelerinin hepsi aynı seçilir !!!!

\*\*\*\*\*ButtonGroup sürüklenerek ekrana bırakılır tasarım alanında görülmez kütükte görülür !!!!



# PENCERE KAPAMA (EXIT)

```
}  
  
private void CikisActionPerformed(java.awt.event.ActionEvent evt) {  
  
    System.exit(0);  
  
    // TODO add your handling code here:  
  
}
```

Alan Hesabı

Uzunluk	Genişlik	Toplam
<input type="text"/>	<input type="text"/>	<input type="text"/>

Metrekare  
 Desimetrekare  
 Santimetrekare  
 Milimetrekare

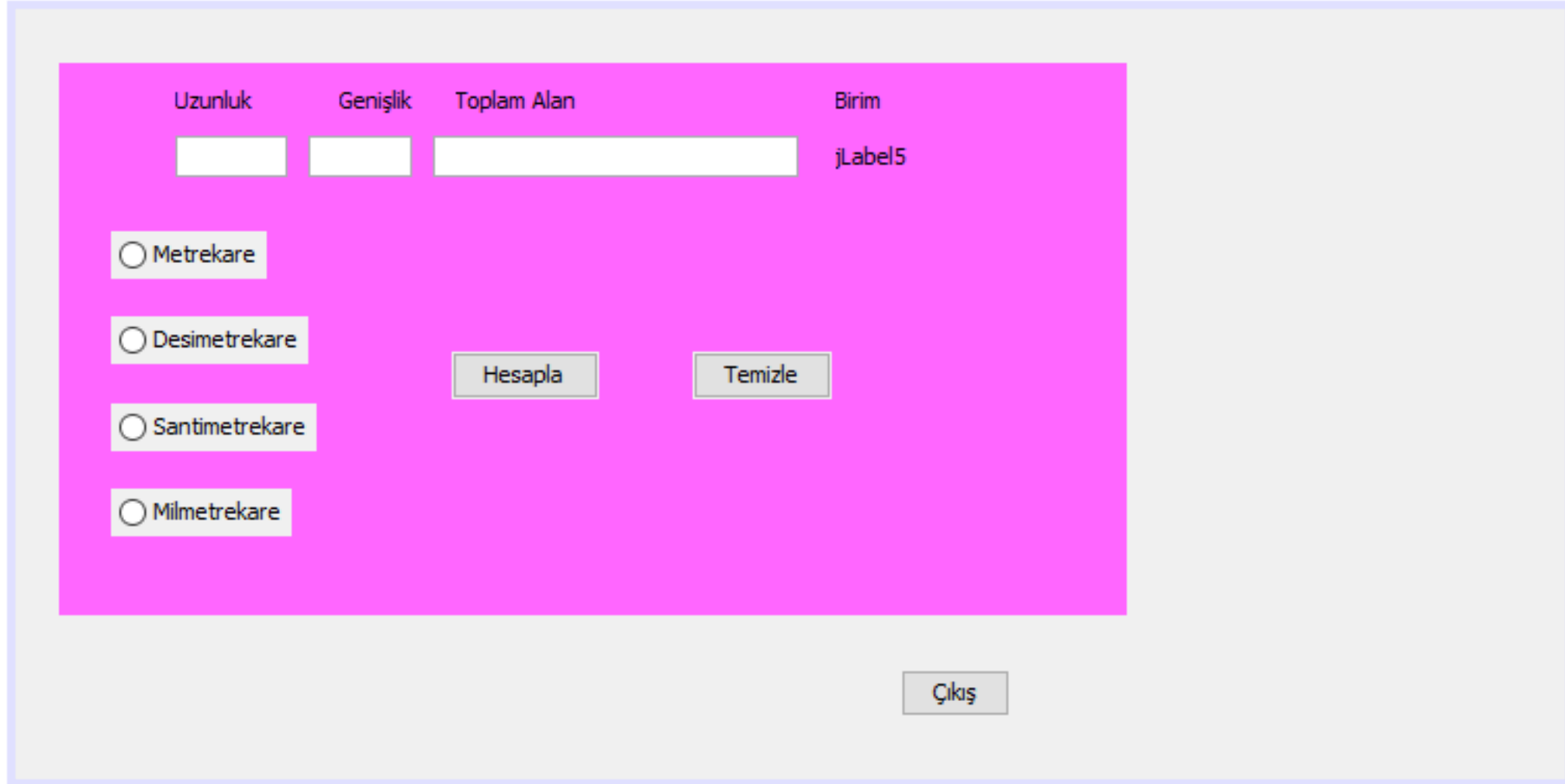
Hesapla      Temizle

Çıkış

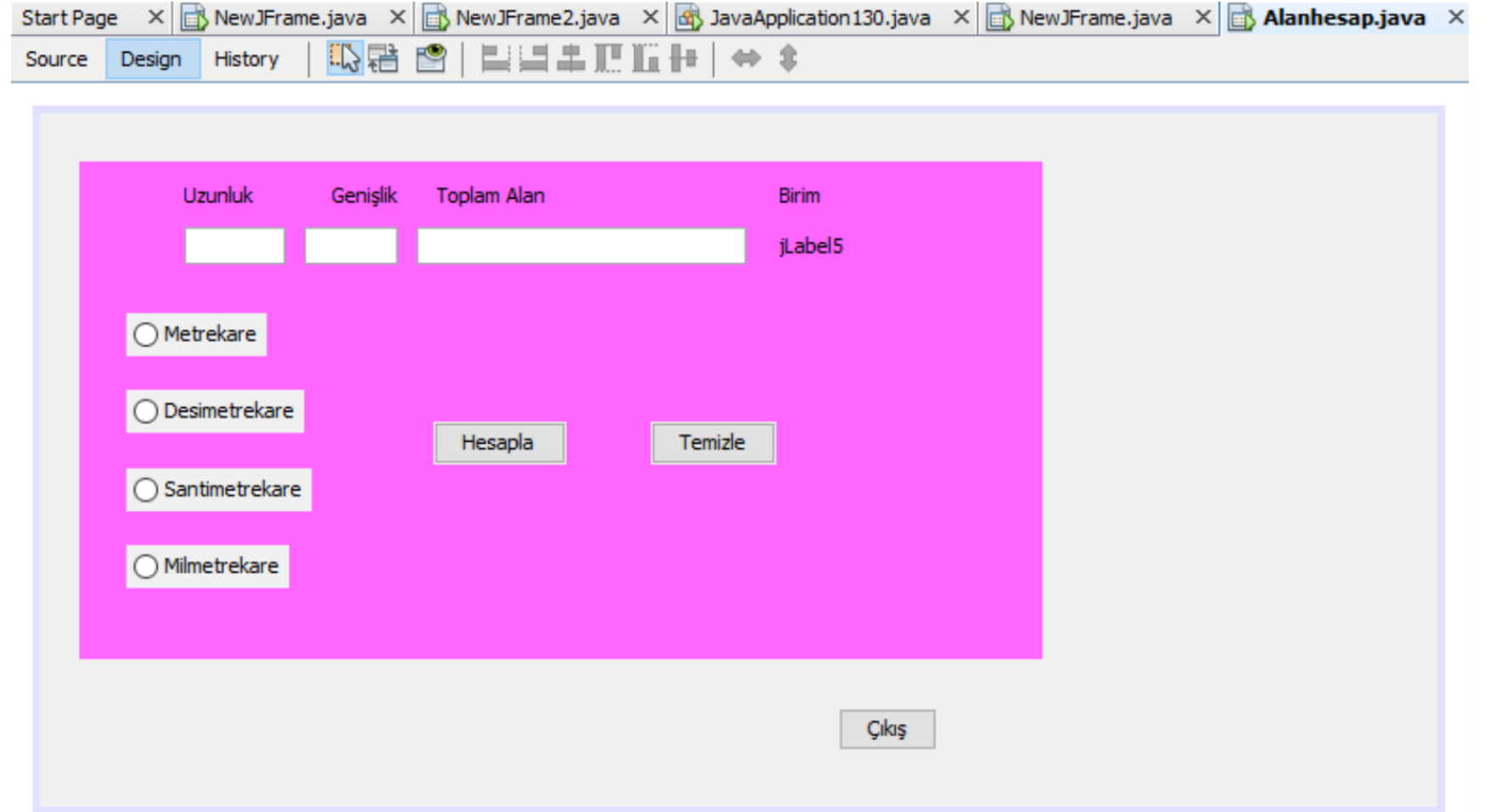
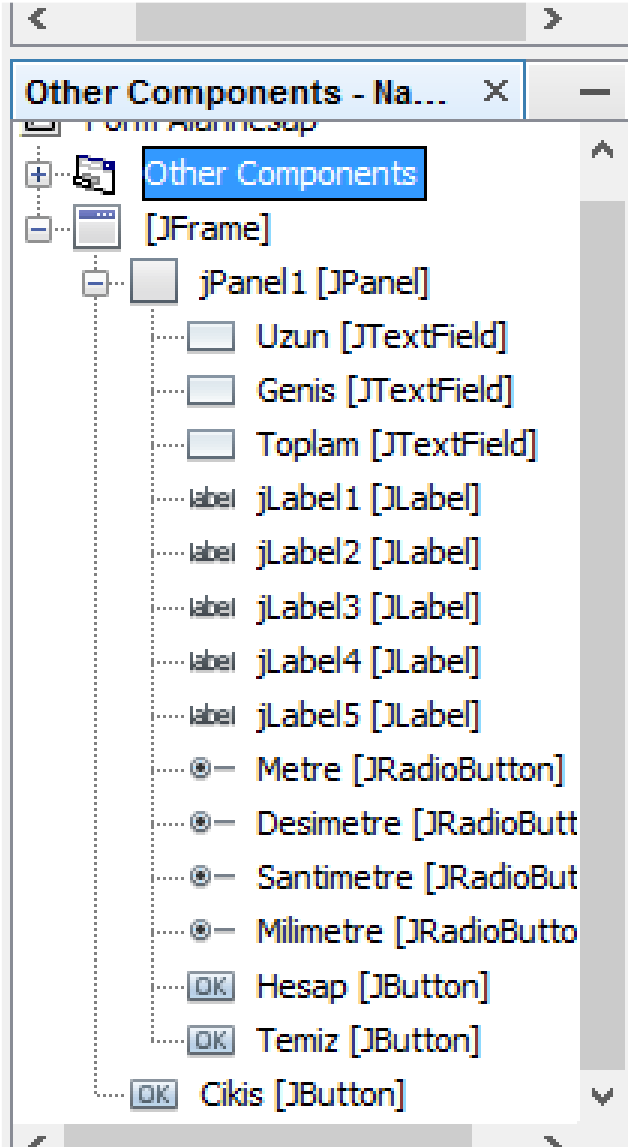
# ÖRNEK : ALAN HESABI

- Uzunluk ve Geniřliđi verilen alanı, metrekare, desimetrekare, santimetrekare veya milimetrekare olarak hesaplayınız. Birimlerini yazdırınız.

# 1. Alan Hesabı Arayüz Tasarımı

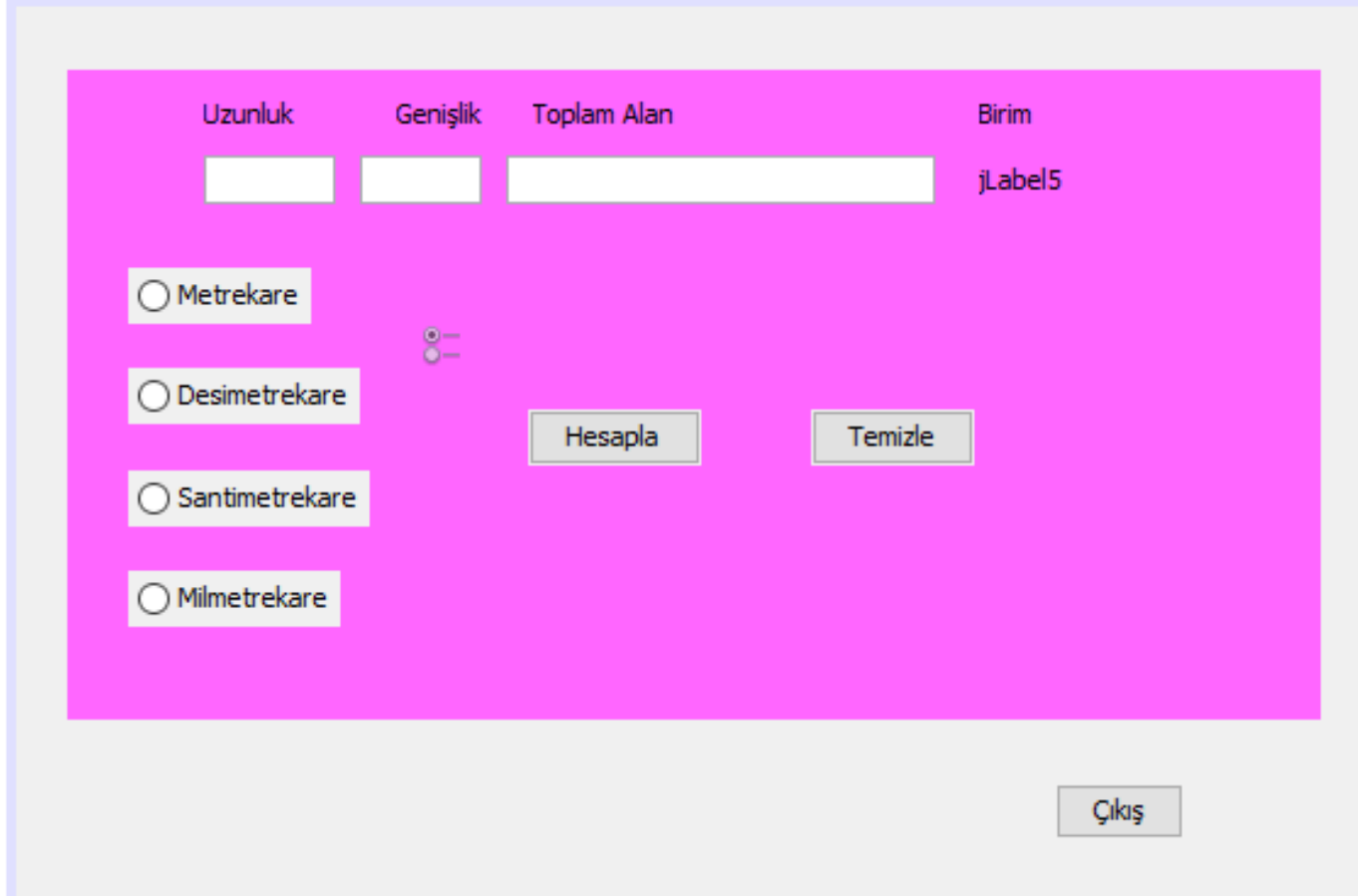
A screenshot of the 'Alanhesap.java' application interface. The interface is displayed on a light gray background. At the top, there are four labels: 'Uzunluk', 'Genişlik', 'Toplam Alan', and 'Birim'. Below 'Uzunluk' and 'Genişlik' are two text input fields. Below 'Toplam Alan' is a larger text input field. Below 'Birim' is a label 'jLabel5'. On the left side, there are four radio buttons with labels: 'Metrekare', 'Desimetrekare', 'Santimetrekare', and 'Milmetrekare'. In the center, there are two buttons: 'Hesapla' and 'Temizle'. At the bottom center, there is a button labeled 'Çıkış'.

## 2. Komutların Adlandırılması





### 3. Button Group Oluştur



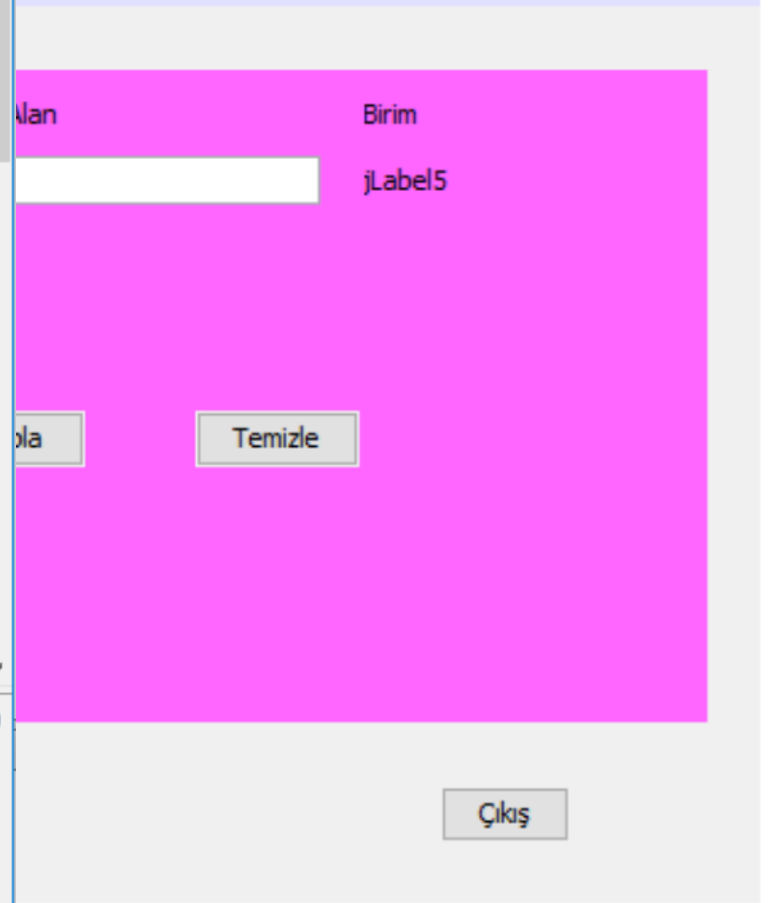
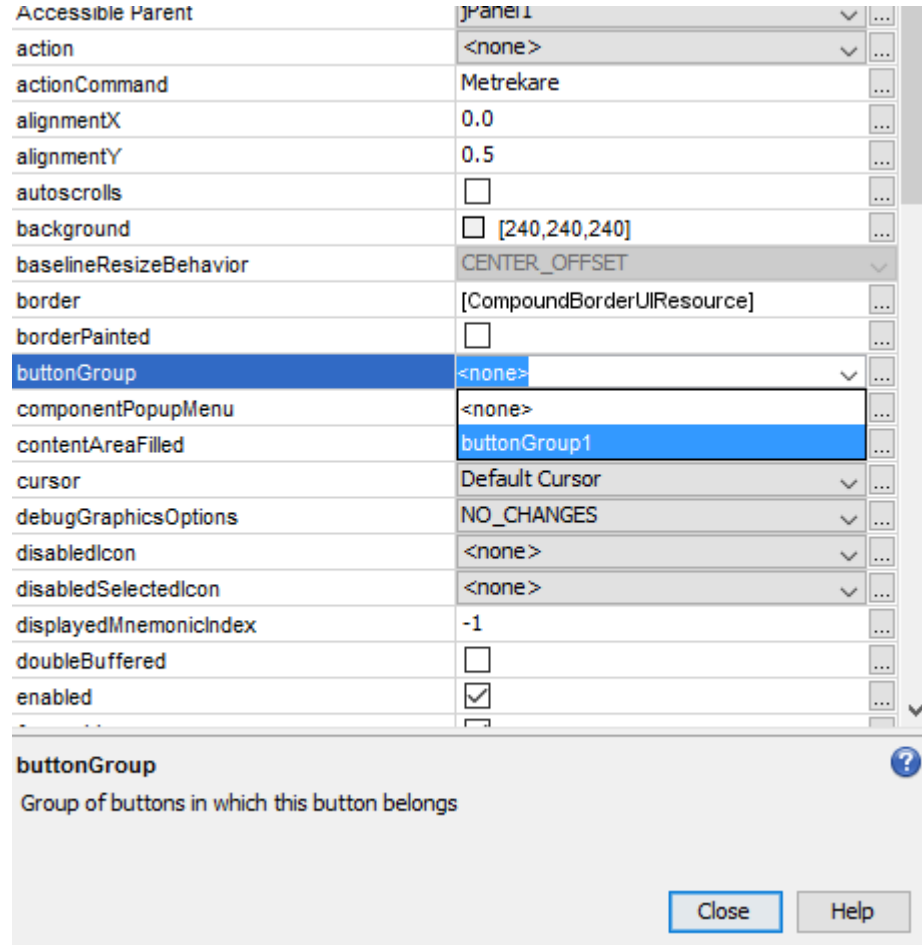
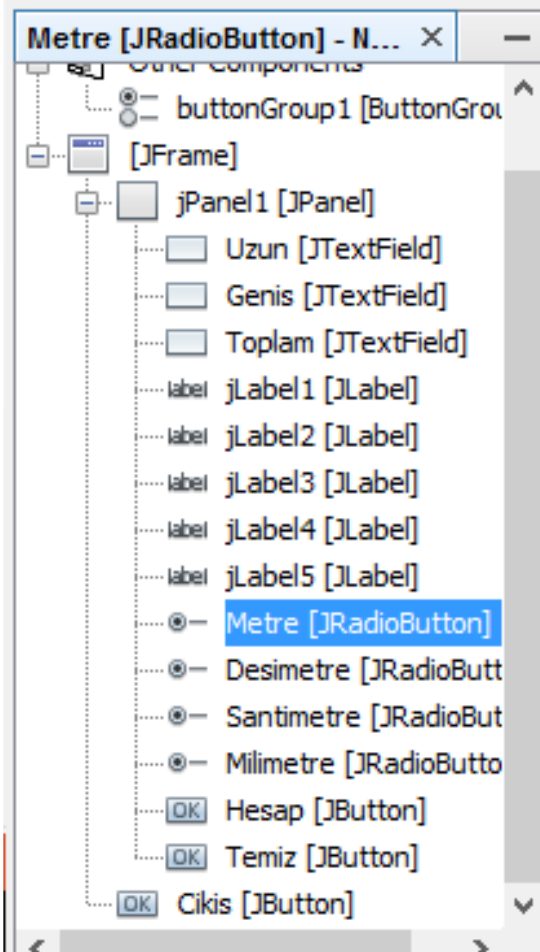
The screenshot shows a Java Swing window with a light gray background. Inside the window, there is a pink rectangular area containing the following elements:

- Four text input fields labeled "Uzunluk", "Genişlik", "Toplam Alan", and "Birim". The "Birim" field contains the text "jLabel5".
- A vertical list of four radio buttons with labels: "Metrekare", "Desimetrekare", "Santimetrekare", and "Milmetrekare".
- Two buttons labeled "Hesapla" and "Temizle" positioned below the radio buttons.
- A "Çıkış" button located at the bottom right of the window.

\*\*\*\*\*Button Group yapılmazsa radio düğmelerinin hepsi aynı seçilir !!!!

\*\*\*\*\*ButtonGroup sürüklenerek ekrana bırakılır tasarım alanında görülmez kütükte görülür !!!!

# 3. Properties Button Group Oluşturulması



\*Tüm Radiobuttonlar teker teker Button Group a eklenir !!!

## 4. Temizle Konumutu Kodlarının yazımı

```
private void TemizActionPerformed(java.awt.event.ActionEvent evt) {  
  
    Uzun.setText (null) ;  
    Genis.setText (null) ;  
    Toplam.setText (null) ;  
  
    // TODO add your handling code here  
  
}
```

Desimetrekare

Hesapla

Temizle

Santimetrekare

Milmetrekare

Çıkış

## 5. Pencereyi kapama komutu kodları

```
private void CikisActionPerformed(java.awt.event.ActionEvent evt) {  
  
    System.exit(0);  
  
    // TODO add your handling code here  
}
```

The screenshot shows a Java Swing window with a pink background. At the top, there are four labels: "Uzunluk", "Genişlik", "Toplam Alan", and "Birim". Below "Uzunluk" and "Genişlik" are text input fields. Below "Toplam Alan" is a larger text input field. Below "Birim" is a label "jLabel5". On the left side, there are four radio buttons with labels: "Metrekare", "Desimetrekare", "Santimetrekare", and "Milimetrekare". In the center, there are two buttons: "Hesapla" and "Temizle". At the bottom right, there is a button labeled "Çıkış" (Exit), which is highlighted with a red box. The window has a standard Mac OS-style title bar at the bottom.

# Try catch metodu :

- Oluşacak istisnaları yakalamak için kullanılır.
- Dene ve yakala.

# 6. Hesapla Komutu

1.

```
private void HesapActionPerformed(java.awt.event.ActionEvent evt) {  
  
    double u,g,t;  
    u = Double.parseDouble(Uzun.getText());  
    g = Double.parseDouble(Genis.getText());  
  
}
```

2.

```
private void hesapActionPerformed(java.awt.event.ActionEvent evt) {  
  
    trycatchdouble u,g,t;  
    u = Double.parseDouble(Uzun.getText());  
    g = Double.parseDouble(Genis.getText());  
  
    // TODO add your handling code here:  
  
}
```

Trycatch + TAB Tuşu

3.

```
private void HesapActionPerformed(java.awt.event.ActionEvent evt) {  
  
    try {  
  
    } catch (Exception e) {  
    }  
  
    double u,g,t;  
    u = Double.parseDouble(Uzun.getText());  
    g = Double.parseDouble(Genis.getText());  
  
}
```

4.

```
private void HesapActionPerformed(java.awt.event.ActionEvent evt) {  
  
    try {  
        double u,g,t;  
        u = Double.parseDouble(Uzun.getText());  
        g = Double.parseDouble(Genis.getText());  
  
    } catch (Exception e) {  
  
    }  
  
}
```

# \*\*\*Hatalı deęer girilmesi veya radio düęmesi seçimi yapılmaması gerektiren uyarı mesajları !!!!

```
private void HesapActionPerformed(java.awt.event.ActionEvent evt) {
```

```
    try {  
        double u,g,t;  
        u = Double.parseDouble(Uzun.getText());  
        g = Double.parseDouble(Genis.getText());
```

5.

```
        if (!(Metre.isSelected()) && !(Desimetre.isSelected()) && !(Santimetre.isSelected()) && !(Milimetre.isSelected())) {  
            Toplam.setText("Metre, desimetre, santimetre veya milimetre seç");  
        }
```

6.

```
    } catch (NumberFormatException e) {  
        Topla.setText("Sayı girilmeli ");
```



Uzunluk	Genişlik	Toplam Alan	Birim
<input type="text"/>	<input type="text"/>	<input type="text" value="Sayı girilmeli"/>	JLabel5
<input type="radio"/> Metrekare			
<input type="radio"/> Desimetre-kare		<input type="button" value="Hesapla"/>	<input type="button" value="Temizle"/>
<input type="radio"/> Santimetre-kare			
<input type="radio"/> Milimetre-kare			

```
private void HesapActionPerformed(java.awt.event.ActionEvent evt) {
```

```
try {
```

```
double u,g,t;
```

```
u = Double.parseDouble(Uzun.getText());
```

```
g = Double.parseDouble(Genis.getText());
```

```
if (!(Metre.isSelected()) && !(Desimetre.isSelected()) && !(Santimetre.isSelected()) && !(Milimetre.isSelected())) {
```

```
Toplam.setText("Metre, desimetre, santimetre veya milimetre seç");
```

```
}
```

```
} catch (NumberFormatException e) {
```

```
Topla.setText("Sayı girilmeli ");
```

```
}
```

5.

6.

Radyo düğmesi seçilmemesi  
durumunda uyarı !!!

The screenshot shows a Java Swing application window with a pink background. It contains a form for calculating area. The form has four input fields: 'Uzunluk' (Length) with the value '10', 'Genişlik' (Width) with the value '5', 'Toplam Alan' (Total Area) with the text 'santimetre veya milimetre seç', and 'Birim' (Unit) with the text 'jLabel5'. Below these fields are four radio buttons for unit selection: 'Metrekare', 'Desimetrekare', 'Santimetrekare', and 'Milmetrekare'. There are two buttons: 'Hesapla' (Calculate) and 'Temizle' (Clear). At the bottom right, there is a 'Çıkış' (Exit) button.



# Radio düğmeleri görev kodları

```
if (!(Metre.isSelected()) && !(Desimetre.isSelected()) && !(Santimetre.isSelected()) && !(Milimetre.isSelected())) {  
Topla.setText("Metre, desimetre, santimetre veya milimetre seç");  
}
```

```
if (Metre.isSelected()) {  
t = 2 * (u + g) * 1;  
String top = Double.toString(t);  
Topla.setText(top);  
jLabel5.setText("metrekare");  
}  
if (Desimetre.isSelected()) {  
t = 2 * (u + g) * 100;  
String top = Double.toString(t);  
Topla.setText(top);  
jLabel5.setText("Desimetrekare");  
}  
if (Santimetre.isSelected()) {  
t = 2 * (u + g) * 10000;  
String top = Double.toString(t);  
Topla.setText(top);  
jLabel5.setText("Santimetrekare");  
}  
if (Milimetre.isSelected()) {  
t = 2 * (u + g) * 1000000;  
String top = Double.toString(t);  
Topla.setText(top);  
jLabel5.setText("Milimetrekare");  
}
```

The screenshot shows a Java Swing application window with a pink background. The window contains a form with the following elements:

Uzunluk	Genişlik	Toplam Alan	Birim
20	30	10000.0	Desimetrekare

Below the table, there are four radio buttons for selecting the unit:

- Metrekare
- Desimetrekare
- Santimetrekare
- Milimetrekare

There are two buttons: "Hesapla" and "Temizle". At the bottom right, there is a "Çıkış" button.

```
} catch (NumberFormatException e) {
```