

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 at the top labeled "Uzunluk" and "Genişlik".
- Four radio buttons stacked vertically on the left, labeled "Metrekare", "Desimetre", "Santimetre", and "Milimetre".
- A "Hesapla" button centered below the radio buttons.

Output - JavaApplication131 (run) x

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

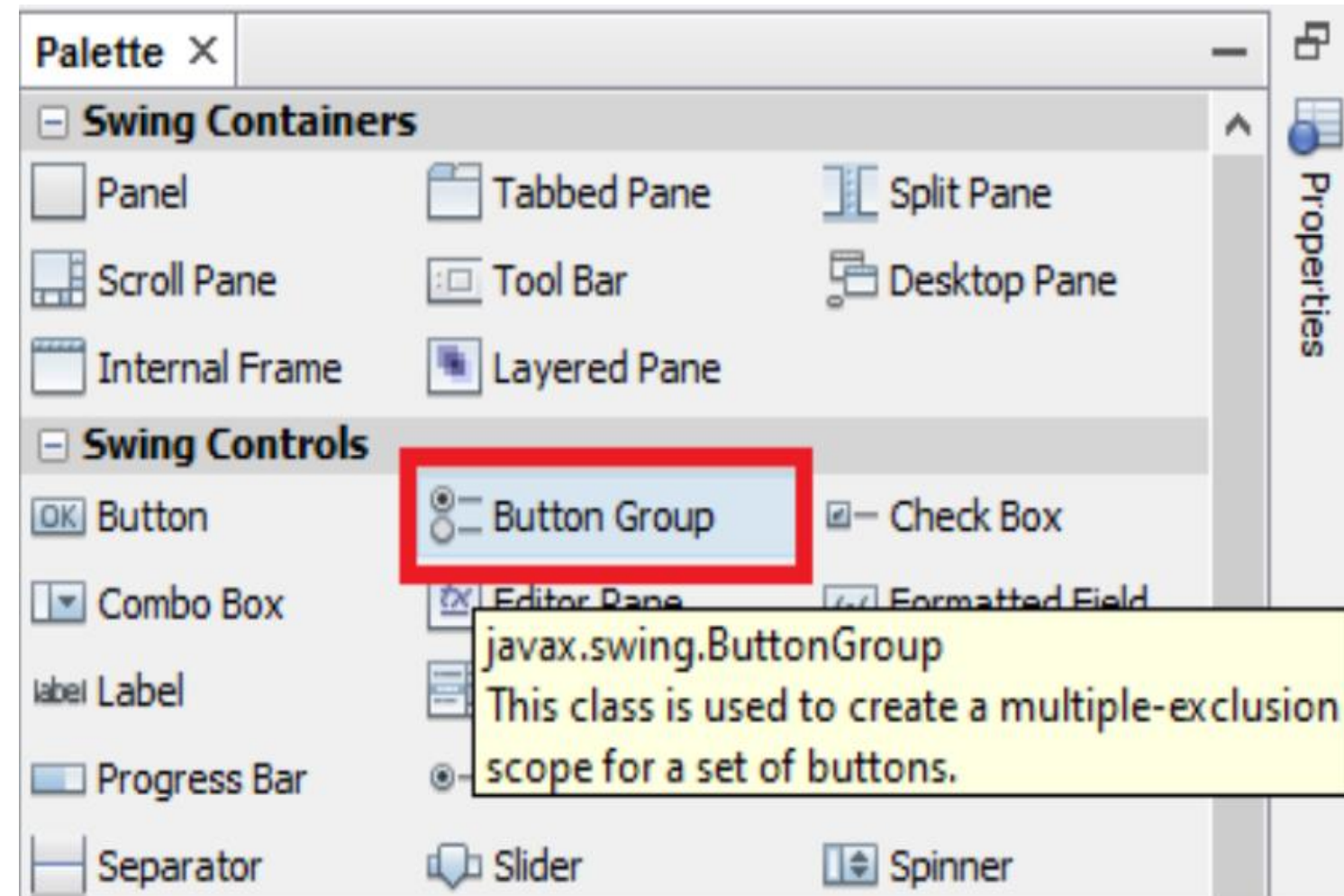
Metre [JRadioButton] - Properties

Properties	Binding	Events	Code
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"/>
buttonGroup			buttonGroup1
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

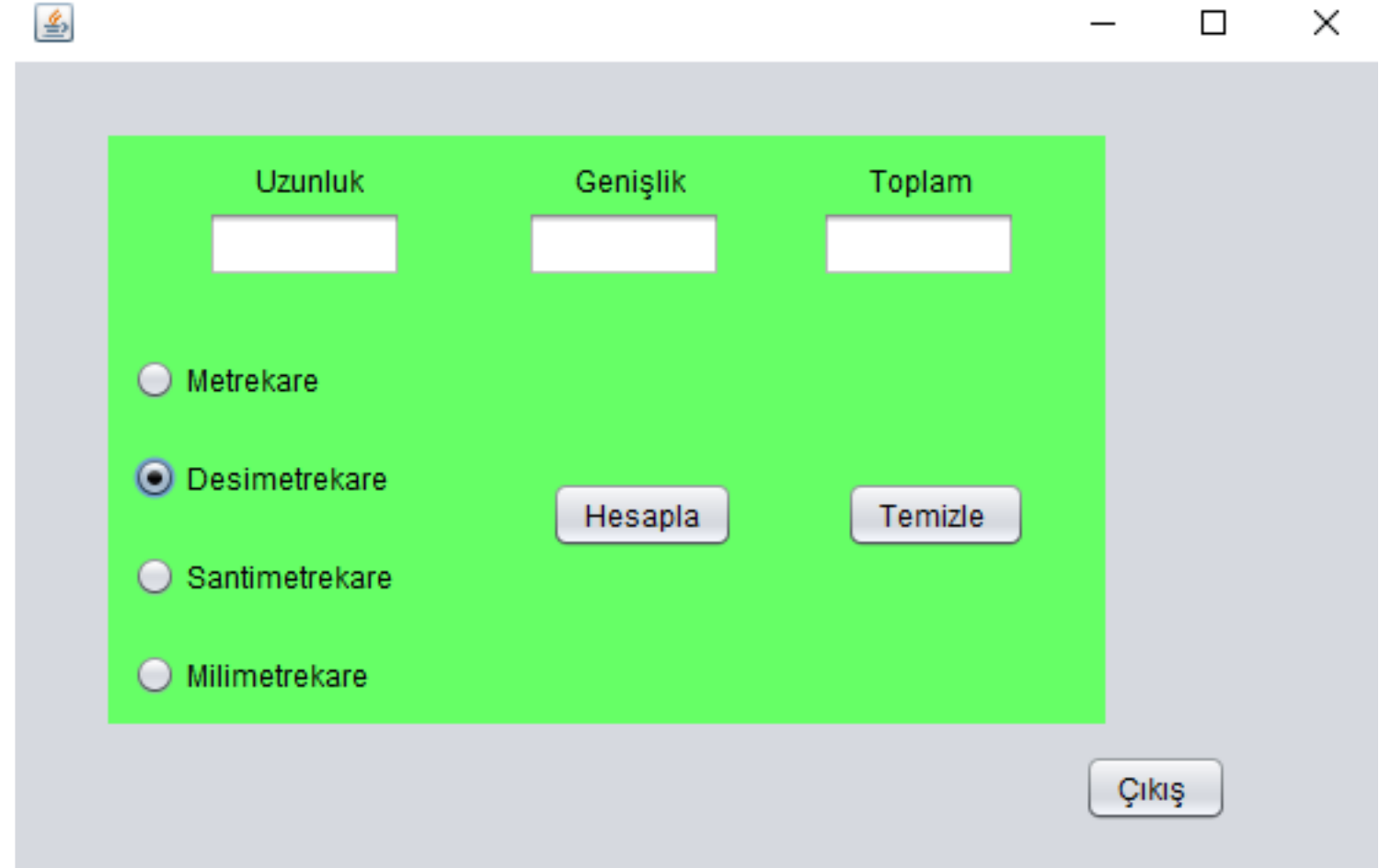
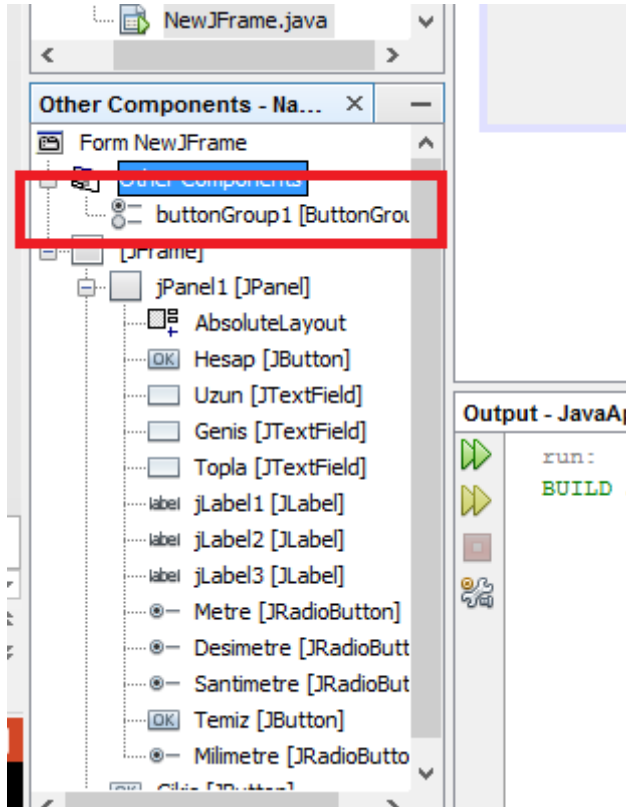
Close Help

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

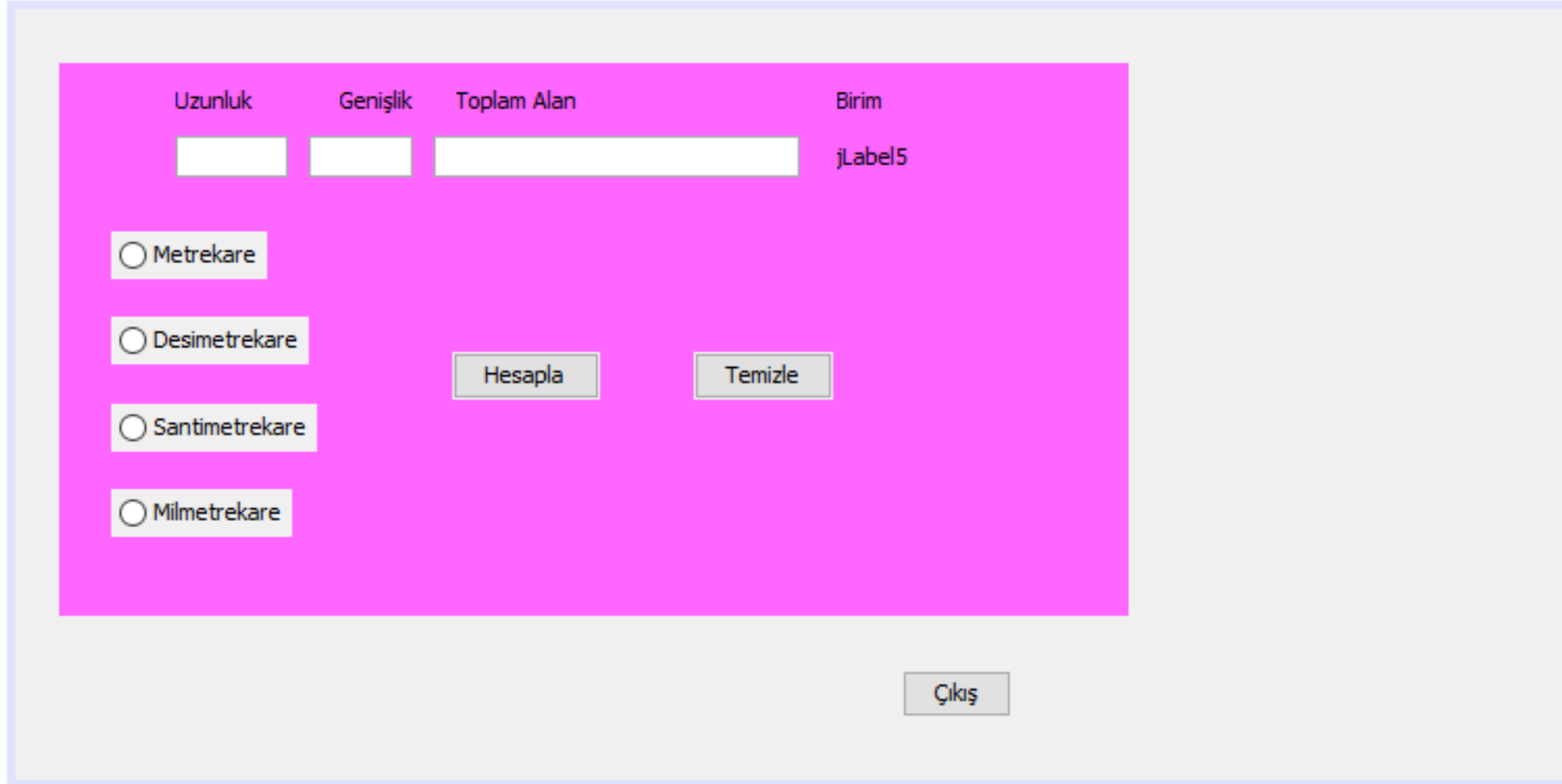
Hesapla Temizle

Çıkış

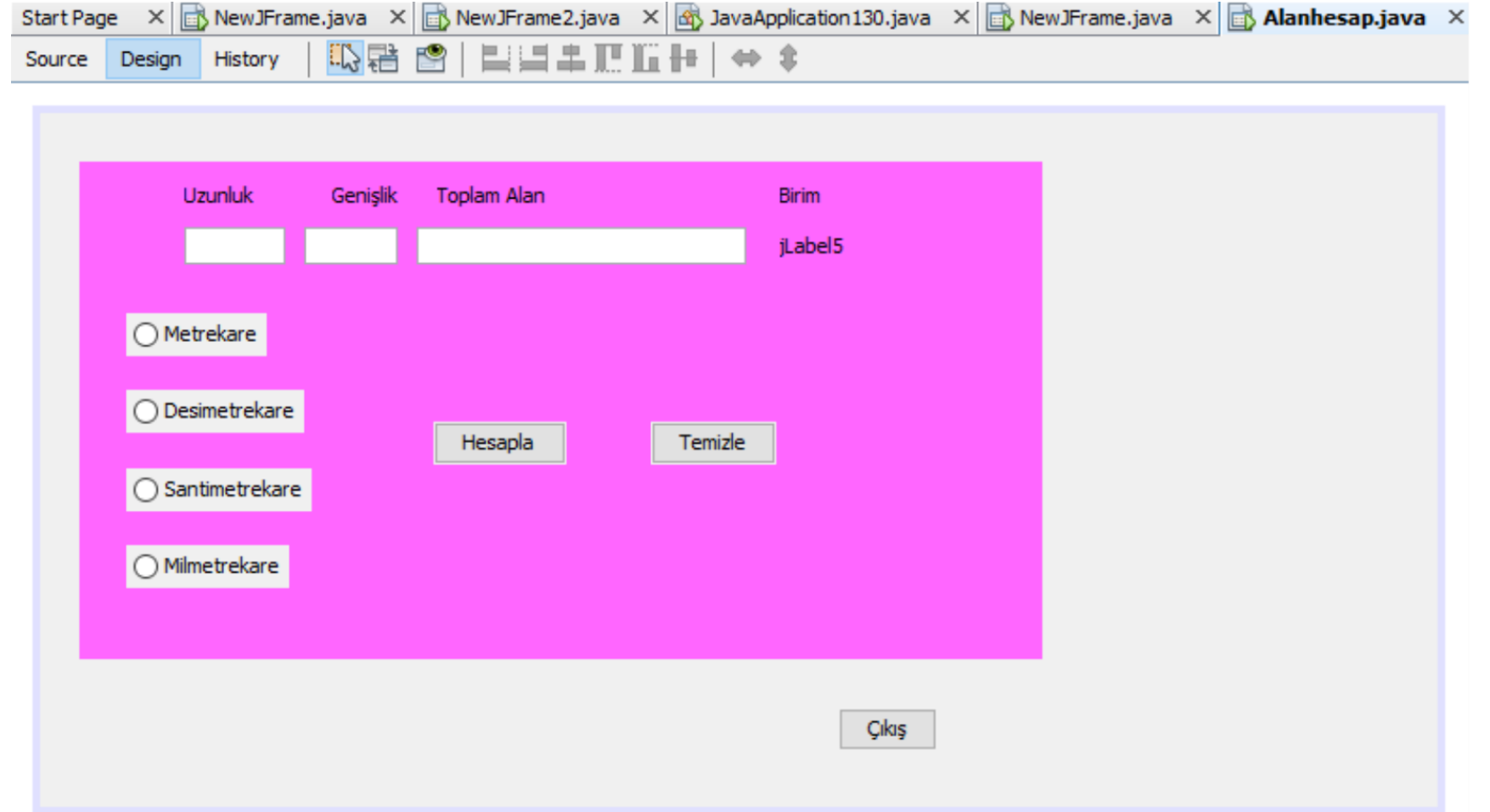
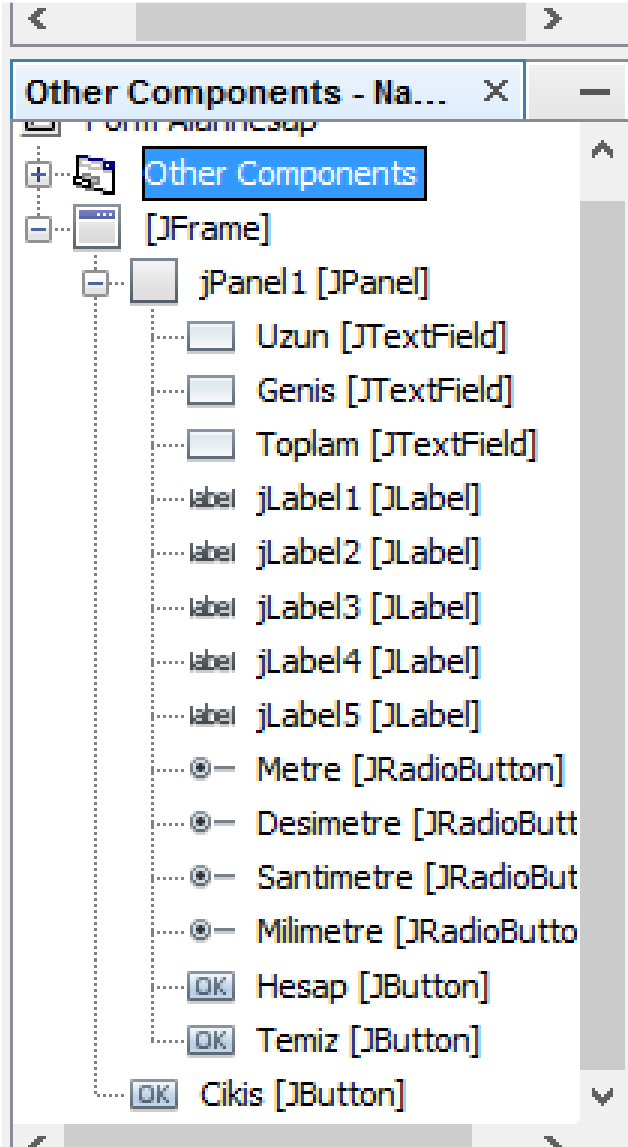
ÖRNEK : ALAN HESABI

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

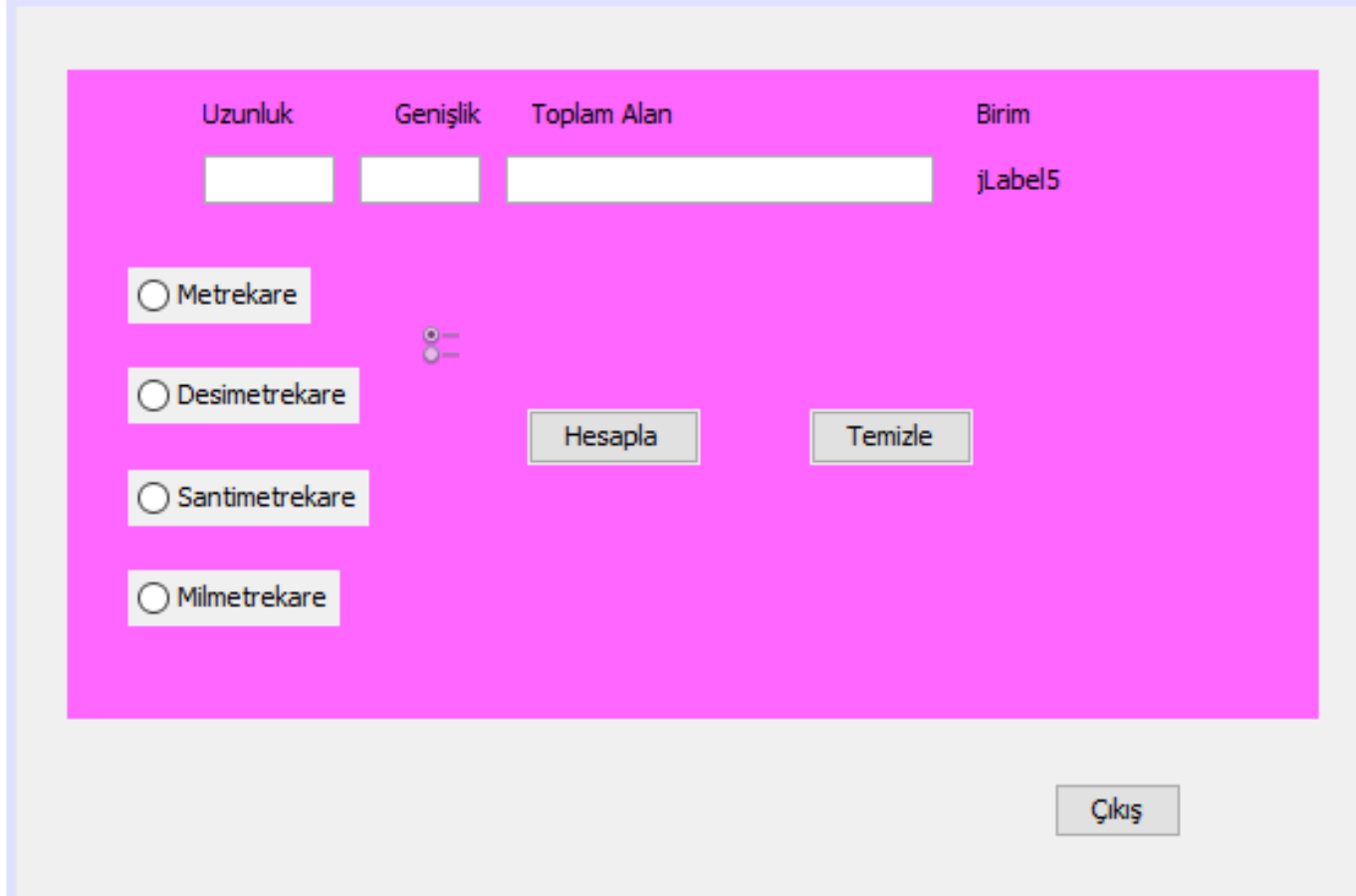
1. Alan Hesabı Arayüz Tasarımı

A screenshot of the GUI design for 'Alanhesap.java'. The design is set against a light gray background. A large pink rectangular area contains the main form elements. At the top of this area, there are four labels: 'Uzunluk', 'Genişlik', 'Toplam Alan', and 'Birim'. Below 'Uzunluk' and 'Genişlik' are two white text input fields. Below 'Toplam Alan' is a wider white text input field. Below 'Birim' is a label 'jLabel5'. On the left side of the pink area, there are four radio button options: 'Metrekare', 'Desimetrekare', 'Santimetrekare', and 'Milmetrekare'. In the center of the pink area, there are two buttons: 'Hesapla' and 'Temizle'. Below the pink area, centered, is a button labeled 'Çıkış'.

2. Komutların Adlandırılması



3. Button Group Oluştur

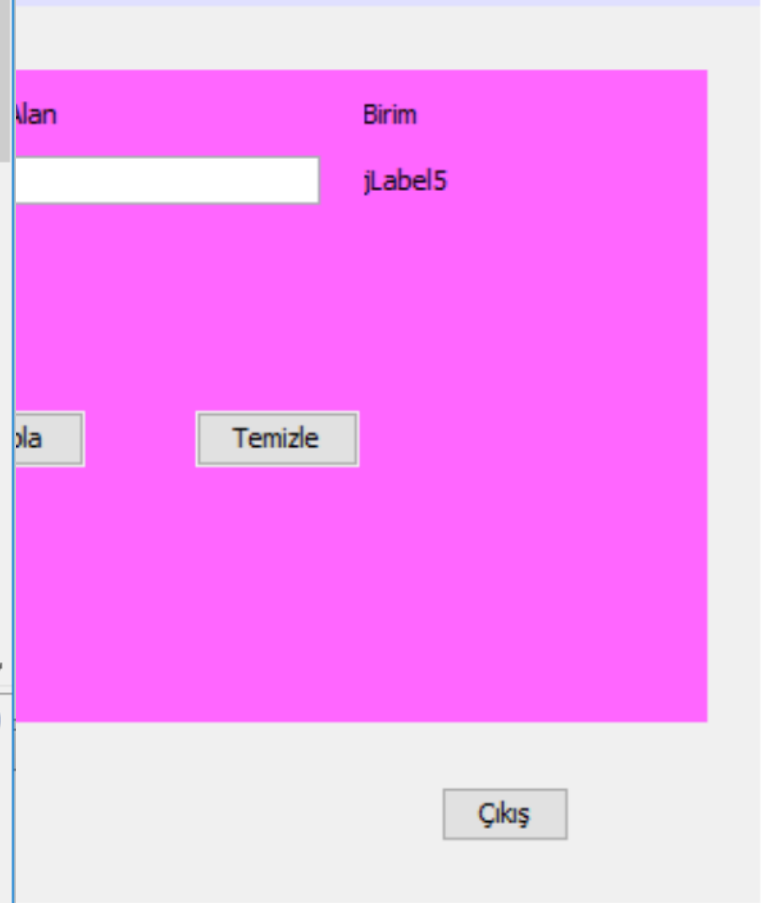
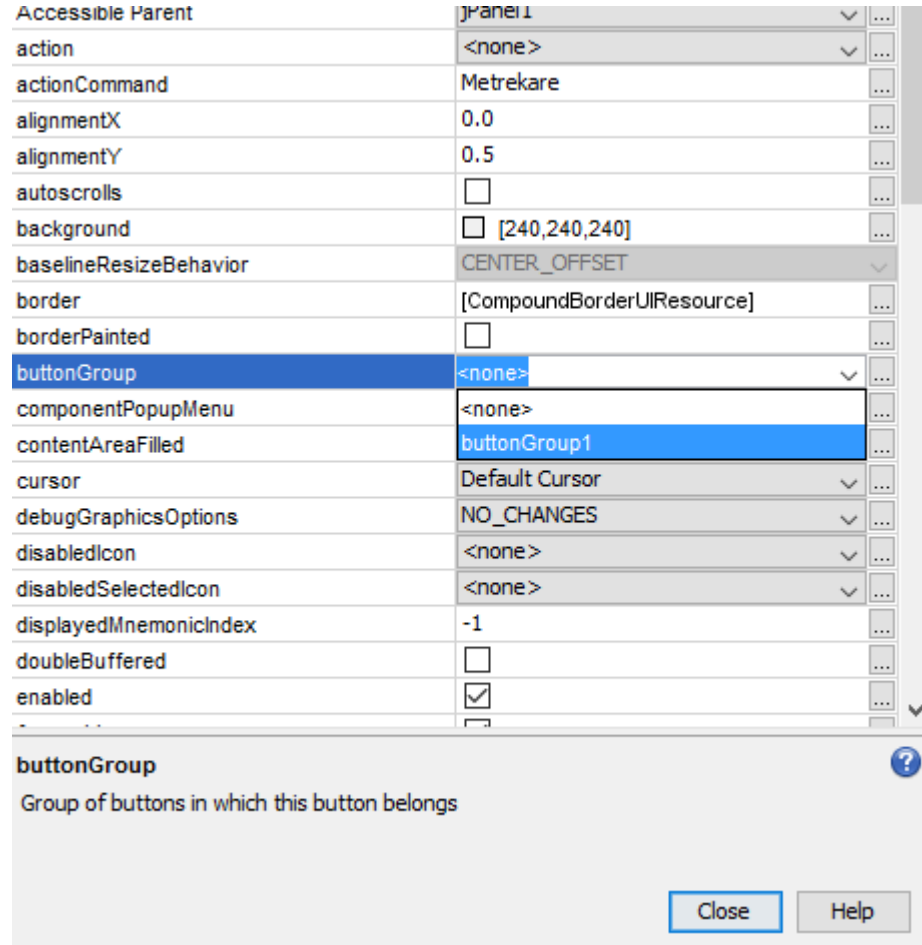
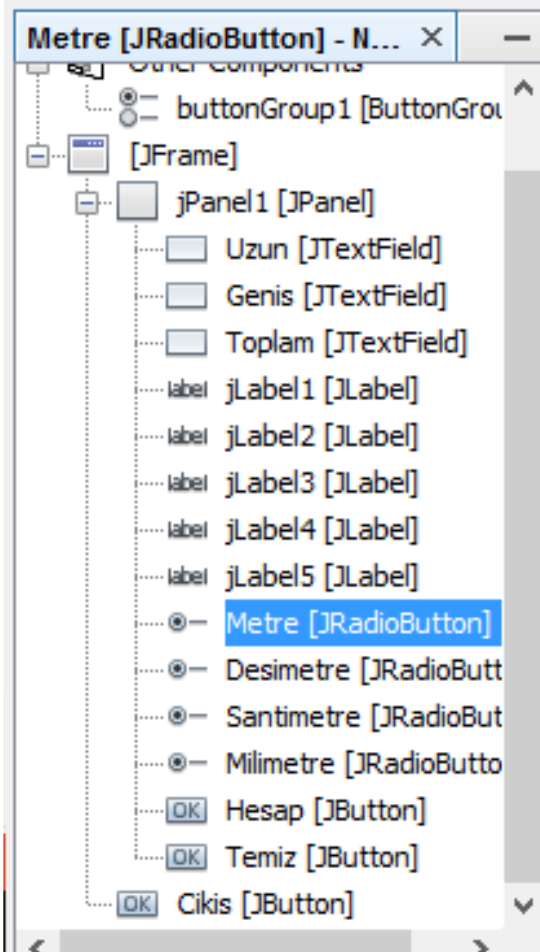


The screenshot shows a Java Swing window with a light gray background. Inside the window, there is a pink rectangular area containing a form. The form has four text input fields at the top: "Uzunluk", "Genişlik", "Toplam Alan", and "Birim". Below these fields are four radio buttons for unit selection: "Metrekare", "Desimetrekare", "Santimetrekare", and "Milmetrekare". To the right of the radio buttons are two buttons: "Hesapla" and "Temizle". At the bottom right of the window, outside the pink area, is a "Çıkış" button. The text "jLabel5" is visible next to the "Birim" field.

*****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. To the right of "Birim" is a label "jLabel5". Below these are four radio buttons for unit selection: "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 with a close button.

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 light gray background. The main content area has a pink background. At the top, there are four labels: "Uzunluk", "Genişlik", "Toplam Alan", and "Birim". Below "Uzunluk" is a text field containing "10". Below "Genişlik" is a text field containing "5". Below "Toplam Alan" is a text field containing "santimetre veya milimetre seç". Below "Birim" is a label "jLabel5". Below these fields are four radio buttons: "Metrekare", "Desimetrekaire", "Santimetrekaire", and "Milmetrekare". The "Desimetrekaire" radio button is selected. Below the radio buttons are two buttons: "Hesapla" and "Temizle". At the bottom right of the window is a button labeled "Çıkış".

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 unit selection:

- Metrekare
- Desimetrekare
- Santimetrekare
- Milimetrekare

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

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