



YALOVA ÜNİVERSİTESİ
university of yalova

Bilgisayar Programcılığı

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- ▶ Tip Dönüşümleri
 - ▶ Aritmetik Operatörler
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Tip Dönüşümleri

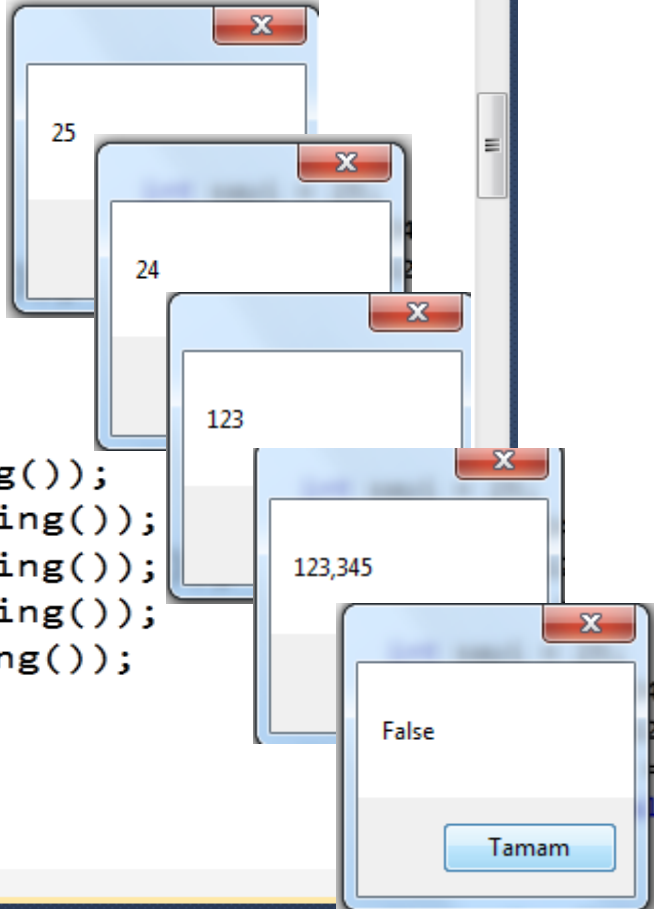
Tip Dönüşümü	Açıklama
Convert.ToBoolean()	İlgili tipi, bool tipine çevirir.
Convert.ToByte()	İlgili tipi, byte tipine çevirir.
Convert.ToChar()	İlgili tipi, char tipine çevirir.
Convert.ToDateTime()	İlgili tipi, datetime tipine çevirir.
Convert.ToSingle()	İlgili tipi, float tipine çevirir.
Convert.ToDouble()	İlgili tipi, double tipine çevirir.
Convert.ToDecimal()	İlgili tipi, decimal tipine çevirir.
Convert.ToInt16()	İlgili tipi, short tipine çevirir.
Convert.ToInt32()	İlgili tipi, int tipine çevirir.
Convert.ToInt64()	İlgili tipi, long tipine çevirir.
Convert.ToString()	İlgili tipi, string tipine çevirir.



Visual Studio IDE showing the code for a button click event handler in a Windows Form. The code demonstrates the conversion of various data types to strings and the display of the results using MessageBox.Show.

```
private void btnToString_Click(object sender, EventArgs e)
{
    int sayi = 25;
    byte sayi_2 = 24;
    long sayi_3 = 123;
    decimal sayi_4 = 123.345M;
    bool sonuc = false;

    MessageBox.Show(sayi.ToString());
    MessageBox.Show(sayi_2.ToString());
    MessageBox.Show(sayi_3.ToString());
    MessageBox.Show(sayi_4.ToString());
    MessageBox.Show(sonuc.ToString());
}
```



The output of the code execution is shown as a series of five overlapping MessageBox dialog boxes, each displaying the string representation of a variable:

- 25
- 24
- 123
- 123,345
- False

The dialog boxes are arranged in a descending staircase pattern from top-left to bottom-right. Each dialog box has a close button (X) in the top right corner and a 'Tamam' button at the bottom.

165 %

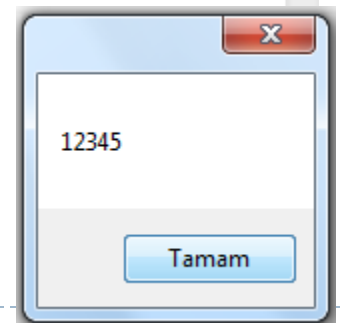
Ln 37

Form1.cs* x Form1.cs [Design]*

_ConvertIslemleri.Form1 btnConvertSinifi_Click(object sender, EventArgs e)

```
private void btnConvertSinifi_Click
(object sender, EventArgs e)
{
    string metin = "123";
    string metin_2 = "45";

    MessageBox.Show(metin + metin_2);
}
```



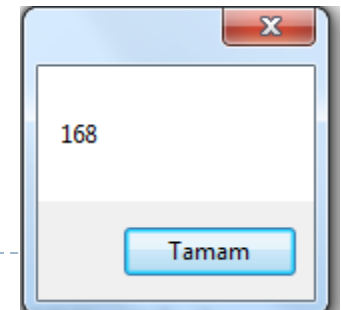
```
private void btnConvertSinifi_Click(object sender, EventArgs e)
{

    string metin = "123";
    string metin_2 = "45";

    int cevrilmis_metin = Convert.ToInt32(metin);
    int cevrilmis_metin_2 = Convert.ToInt32(metin_2);

    MessageBox.Show((cevrilmis_metin + cevrilmis_metin_2).ToString());

}
```

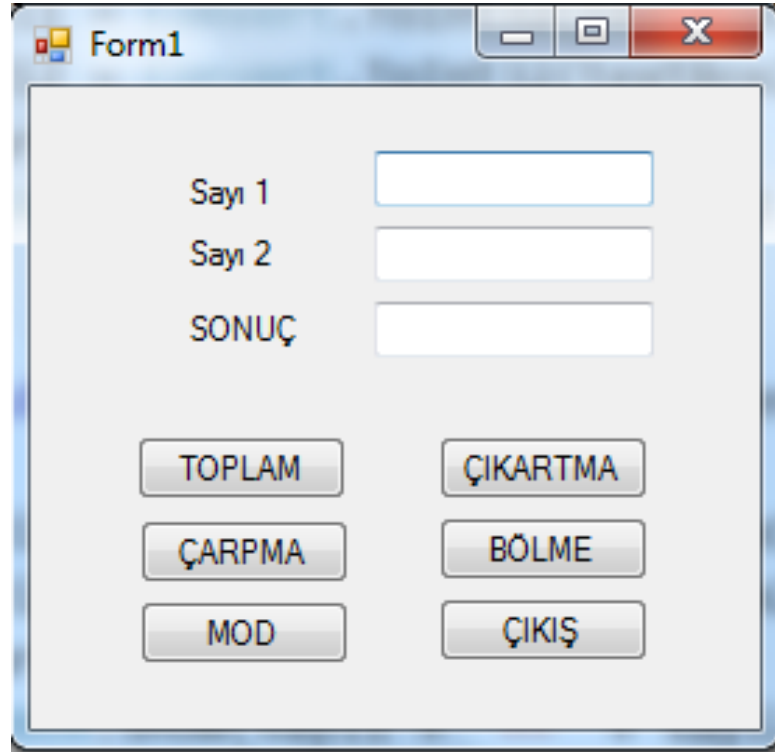


Aritmetik Operatörler

Aritmetik Operatörler	
+	Toplama
-	Çıkarma
*	Çarpma
/	Bölme
%	Bölümden Kalan (Mod)



Örnek – Basit Hesap Makinesi

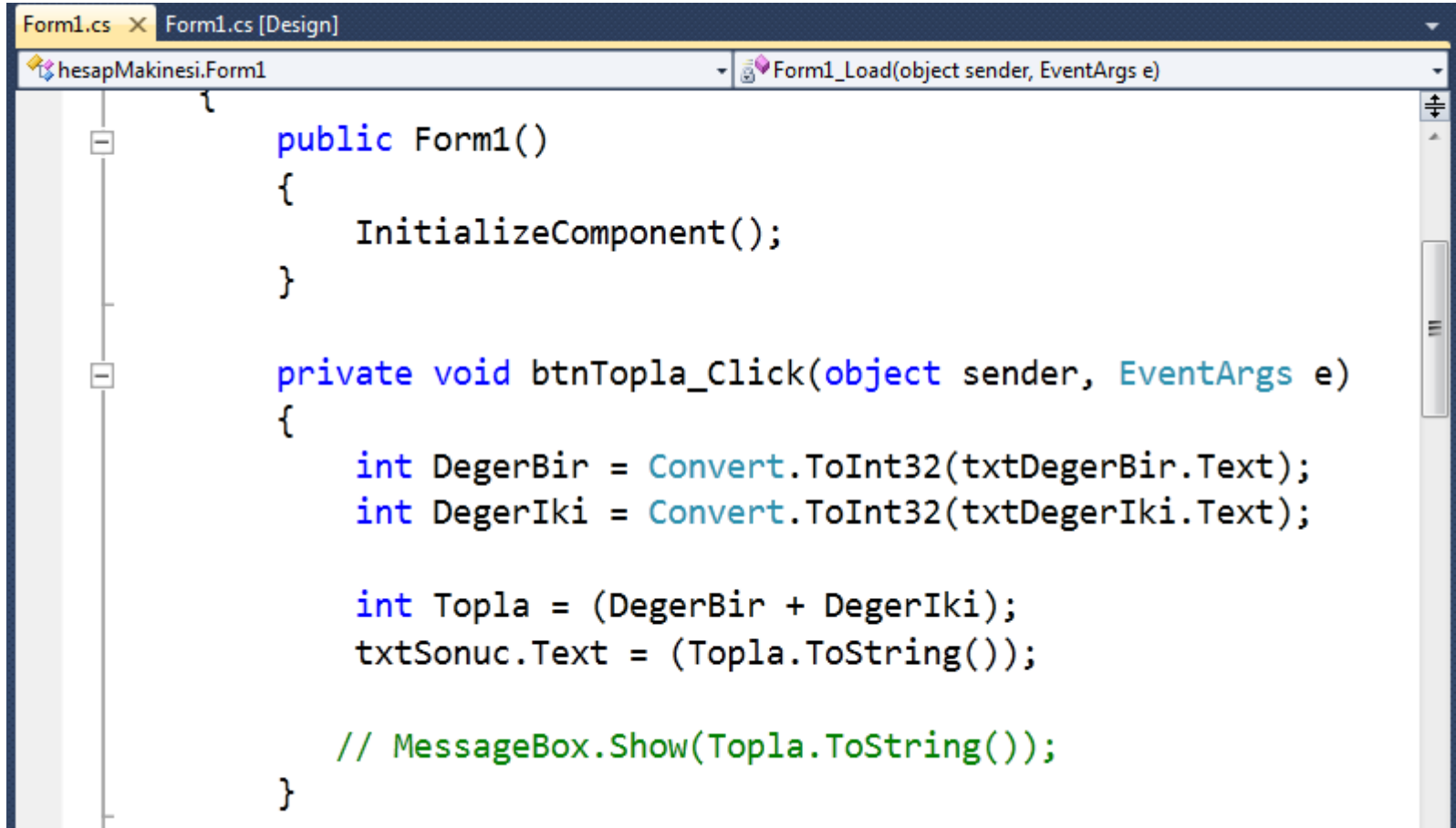


The image shows a screenshot of a Windows application window titled "Form1". The window contains a simple calculator interface with the following elements:

- Three text input fields labeled "Sayı 1", "Sayı 2", and "SONUÇ" (Result).
- Six buttons for arithmetic operations: "TOPLAM" (Addition), "ÇIKARTMA" (Subtraction), "ÇARPMA" (Multiplication), "BÖLME" (Division), "MOD", and "ÇIKIŞ" (Exit).



Örnek – Basit Hesap Makinesi



```
Form1.cs x Form1.cs [Design]
hesapMakinesi.Form1 Form1_Load(object sender, EventArgs e)

public Form1()
{
    InitializeComponent();
}

private void btnTopla_Click(object sender, EventArgs e)
{
    int DegerBir = Convert.ToInt32(txtDegerBir.Text);
    int DegerIki = Convert.ToInt32(txtDegerIki.Text);

    int Topla = (DegerBir + DegerIki);
    txtSonuc.Text = (Topla.ToString());

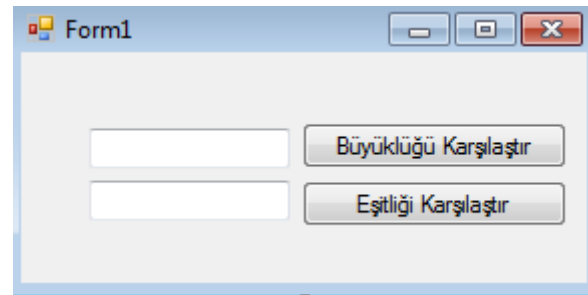
    // MessageBox.Show(Topla.ToString());
}
```



Karşılaştırma Operatörleri

Operatör	Açıklama
==	Eşittir
!=	Eşit Değildir
>	Büyüktür
>=	Büyük Eşittir
<	Küçüktür
<=	Küçük Eşittir

ÖRNEK:



The screenshot shows a Windows application window titled "Form1". Inside the window, there are two text input fields stacked vertically. To the right of the top input field is a button labeled "Büüklüğü Karşılaştır". To the right of the bottom input field is a button labeled "Eşitliğı Karşılaştır".

```
Form1.cs* x Form1.cs [Design]*
KarsilastirmaOperatorleri.Form1 button1_Click(object sender, EventArgs e)

private void button1_Click(object sender, EventArgs e)
{
    int sayi1 = Convert.ToInt32(textBox1.Text);
    int sayi2 = Convert.ToInt32(textBox2.Text);
    bool karsilastir = sayi1 > sayi2;
    MessageBox.Show(sayi1 + ">" + sayi2 + ":" + karsilastir);
}

private void button2_Click(object sender, EventArgs e)
{
    int sayi1 = Convert.ToInt32(textBox1.Text);
    int sayi2 = Convert.ToInt32(textBox2.Text);
    bool karsilastir = sayi1 == sayi2;
    MessageBox.Show(sayi1 + "==" + sayi2 + ":" + karsilastir);
}
```

Form1

56

12

Büyüklüğü Karşılaştır

Eşitliği Karşılaştır

56>12:True

Tamam

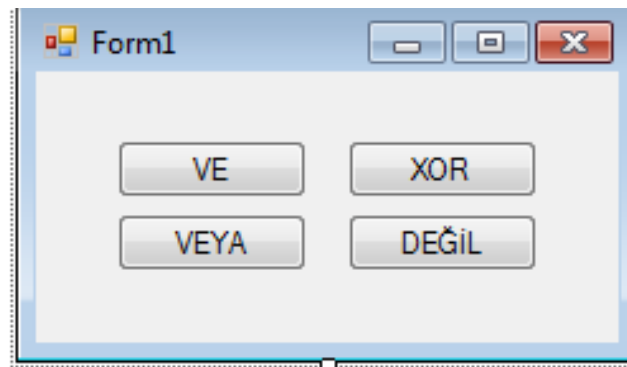
56==12:False

Tamam

Mantıksal Operatörler

VE (&)	VEYA ()	XOR(^)	DEĞİL(!)
$0 \& 0 = 0$	$0 0 = 0$	$0 \wedge 0 = 0$	$0 ! 1 = 1$
$0 \& 1 = 0$	$0 1 = 1$	$0 \wedge 1 = 1$	$1 ! 0 = 0$
$1 \& 0 = 0$	$1 0 = 1$	$1 \wedge 0 = 1$	
$1 \& 1 = 1$	$1 1 = 1$	$1 \wedge 1 = 0$	

ÖRNEK:



```
Form1.cs x Form1.cs [Design]
MantixsalKarsilastirma.Form1 button1_Click(object sender, EventArgs e)
private void button1_Click(object sender, EventArgs e)
{
    MessageBox.Show("0 & 1=" + (0 & 1) );
}

private void button3_Click(object sender, EventArgs e)
{
    MessageBox.Show("0 ^ 1=" + (0 ^ 1));
}

private void button2_Click(object sender, EventArgs e)
{
    MessageBox.Show("0 | 1=" + (0 | 1));
}

private void button4_Click(object sender, EventArgs e)
{
    MessageBox.Show("! 0 =" + !false);
}
//X^y= (!x*y)+(x*!y)
}
```

