

# MTK467 Nesneye Yönelik Programlama

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Hafta 4 - Metodlar 1

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# Metodlar

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- Bir görev için gerekli ifadelerin bir araya getirilmesiyle oluşturulan program parçalarına metod denir.
- Eğer programdaki bir görevi tekrar tekrar farklı parametreler için yapmamız gerekiyorsa, bu görev için bir metod yazma ihtiyacı doğar.
- Örneğin 1'den 7'ye kadar, 15'den 29'a kadar ve 103'den 147'ye kadar tüm sayıları ekrana yazdıran bir program yazmamız istensin.

# Kod tekrarı örneği: PrintNumbers

```
public class PrintNumbers {  
    public static void main(String args[]){  
        int firstNumber;  
        int lastNumber;  
  
        firstNumber = 1;  
        lastNumber = 7;  
  
        System.out.printf("\nNumbers from %d to %d are : ",firstNumber, lastNumber);  
  
        for(int i=firstNumber; i<=lastNumber; i++){  
            System.out.print(i + " ");  
        }  
  
        firstNumber = 15;  
        lastNumber = 29;  
  
        System.out.printf("\nNumbers from %d to %d are : ",firstNumber, lastNumber);  
  
        for(int i=firstNumber; i<=lastNumber; i++){  
            System.out.print(i + " ");  
        }  
  
        firstNumber = 103;  
        lastNumber = 147;  
  
        System.out.printf("\nNumbers from %d to %d are : ",firstNumber, lastNumber);  
  
        for(int i=firstNumber; i<=lastNumber; i++){  
            System.out.print(i + " ");  
        }  
    }  
}
```

[1,7] aralığındaki tüm  
tamsayıların yazdırılması



# Kod tekrarı örneği: PrintNumbers

```
public class PrintNumbers {  
    public static void main(String args[]){  
        int firstNumber;  
        int lastNumber;  
  
        firstNumber = 1;  
        lastNumber = 7;  
  
        System.out.printf("\nNumbers from %d to %d are : ",firstNumber, lastNumber);  
  
        for(int i=firstNumber; i<=lastNumber; i++){  
            System.out.print(i + " ");  
        }  
  
        firstNumber = 15;  
        lastNumber = 29;  
  
        System.out.printf("\nNumbers from %d to %d are : ",firstNumber, lastNumber);  
  
        for(int i=firstNumber; i<=lastNumber; i++){  
            System.out.print(i + " ");  
        }  
  
        firstNumber = 103;  
        lastNumber = 147;  
  
        System.out.printf("\nNumbers from %d to %d are : ",firstNumber, lastNumber);  
  
        for(int i=firstNumber; i<=lastNumber; i++){  
            System.out.print(i + " ");  
        }  
    }  
}
```

[15,29] aralığındaki tüm  
tamsayıların yazdırılması

# Kod tekrarı örneği: PrintNumbers

```
public class PrintNumbers {  
    public static void main(String args[]){  
        int firstNumber;  
        int lastNumber;  
  
        firstNumber = 1;  
        lastNumber = 7;  
  
        System.out.printf("\nNumbers from %d to %d are : ",firstNumber, lastNumber);  
  
        for(int i=firstNumber; i<=lastNumber; i++){  
            System.out.print(i + " ");  
        }  
  
        firstNumber = 15;  
        lastNumber = 29;  
  
        System.out.printf("\nNumbers from %d to %d are : ",firstNumber, lastNumber);  
  
        for(int i=firstNumber; i<=lastNumber; i++){  
            System.out.print(i + " ");  
        }  
  
        firstNumber = 103;  
        lastNumber = 147;  
  
        System.out.printf("\nNumbers from %d to %d are : ",firstNumber, lastNumber);  
  
        for(int i=firstNumber; i<=lastNumber; i++){  
            System.out.print(i + " ");  
        }  
    }  
}
```

**[103,147] aralığındaki tüm tamsayıların yazdırılması**



```
firstNumber = 103;  
lastNumber = 147;  
  
System.out.printf("\nNumbers from %d to %d are : ",firstNumber, lastNumber);  
  
for(int i=firstNumber; i<=lastNumber; i++){  
    System.out.print(i + " ");  
}
```

# Kod tekrarı örneği: PrintNumbers

```
public class PrintNumbers {  
    public static void main(String args[]){
```

```
        int firstNumber;  
        int lastNumber;
```

```
        firstNumber = 1;  
        lastNumber = 7;
```

```
        System.out.printf("\nNumbers from %d to %d are : ",firstNumber, lastNumber);
```

```
        for(int i=firstNumber; i<=lastNumber; i++){  
            System.out.print(i + " ");  
        }
```

```
        firstNumber = 15;  
        lastNumber = 29;
```

```
        System.out.printf("\nNumbers from %d to %d are : ",firstNumber, lastNumber);
```

```
        for(int i=firstNumber; i<=lastNumber; i++){  
            System.out.print(i + " ");  
        }
```

```
        firstNumber = 103;  
        lastNumber = 147;
```

```
        System.out.printf("\nNumbers from %d to %d are : ",firstNumber, lastNumber);
```

```
        for(int i=firstNumber; i<=lastNumber; i++){  
            System.out.print(i + " ");  
        }
```

```
    }
```

```
}
```

**birebir aynı  
kod**

# Kod tekrarı örneği: PrintNumbers

```
public class PrintNumbers {  
    public static void main(String args[]){
```

```
        int firstNumber;  
        int lastNumber;
```

```
        firstNumber = 1;  
        lastNumber = 7;
```

```
        System.out.printf("\nNumbers from %d to %d are : ",firstNumber, lastNumber);
```

```
        for(int i=firstNumber; i<=lastNumber; i++){  
            System.out.print(i + " ");  
        }
```

```
        firstNumber = 15;  
        lastNumber = 29;
```

```
        System.out.printf("\nNumbers from %d to %d are : ",firstNumber, lastNumber);
```

```
        for(int i=firstNumber; i<=lastNumber; i++){  
            System.out.print(i + " ");  
        }
```

```
        firstNumber = 103;  
        lastNumber = 147;
```

```
        System.out.printf("\nNumbers from %d to %d are : ",firstNumber, lastNumber);
```

```
        for(int i=firstNumber; i<=lastNumber; i++){  
            System.out.print(i + " ");  
        }
```

**yalnızca kullandığı  
değerler farklı**

**birebir aynı  
kod**

# PrintNumbersWithMethod

---

- Aynı görevi yapacak kodu yalnızca bir sefer yazıp, farklı değerlerle kullanabilmenin yolu : Bu görev için bir metod tanımlamak



# PrintNumbersWithMethod

Tek sefer yaz

```
1 public class PrintNumbersWithMethod {
2
3     public static void printNumbersInTheInterval(int firstNumber, int lastNumber){
4
5         System.out.printf("\nNumbers from %d to %d are : ",firstNumber, lastNumber);
6
7         for(int i=firstNumber; i<=lastNumber; i++){
8             System.out.print(i + " ");
9         }
10    }
11
12    public static void main(String args[]) {
13
14        int firstNumber;
15        int lastNumber;
16
17        firstNumber = 1;
18        lastNumber = 7;
19
20        printNumbersInTheInterval(firstNumber, lastNumber);
21
22        firstNumber = 15;
23        lastNumber = 29;
24
25        printNumbersInTheInterval(firstNumber, lastNumber);
26
27        firstNumber = 103;
28        lastNumber = 147;
29
30        printNumbersInTheInterval(firstNumber, lastNumber);
31    }
32 }
33
```

1

7

15

29

103

147

farklı değerlerle  
kullan

# Kod tekrarı örneği: AverageOfNumbers.java

---

- [2,11], [18,43] ve [113,157] aralıklarındaki tamsayıların ortalama değerlerini hesaplayan bir Java programı yazınız.

# Kod tekrarı örneği: AverageOfNumbers.java

---

```
public class AverageOfNumbers {  
    public static void main(String args[]) {  
        int firstNumber;  
        int lastNumber;  
  
        double sum = 0;  
        double average = 0;  
  
        firstNumber = 2;  
        lastNumber = 11;  
  
        for(int i=firstNumber; i<=lastNumber; i++){  
            sum += i;  
        }  
  
        average = sum / (lastNumber-firstNumber+1);  
  
        System.out.printf("\nAverage of integers between %d and %d is %.2f", firstNumber, lastNumber, average);  
  
        firstNumber = 18;  
        lastNumber = 43;  
  
        for(int i=firstNumber; i<=lastNumber; i++){  
            sum += i;  
        }  
  
        average = sum / (lastNumber-firstNumber+1);  
  
        System.out.printf("\nAverage of integers between %d and %d is %.2f", firstNumber, lastNumber, average);  
  
        firstNumber = 113;  
        lastNumber = 157;  
  
        for(int i=firstNumber; i<=lastNumber; i++){  
            sum += i;  
        }  
  
        average = sum / (lastNumber-firstNumber+1);  
  
        System.out.printf("\nAverage of integers between %d and %d is %.2f", firstNumber, lastNumber, average);  
    }  
}
```

# Kod tekrarı örneği: AverageOfNumbers.java

---

## Çıktı

```
/Library/Java/JavaVirtualMachines/jdk-9.jdk/Contents/Home
```

```
Average of integers between 2 and 11 is 6.50
```

```
Average of integers between 18 and 43 is 33.00
```

```
Average of integers between 113 and 157 is 154.07
```

```
Process finished with exit code 0
```

# AverageOfNumbersWithMethod.java

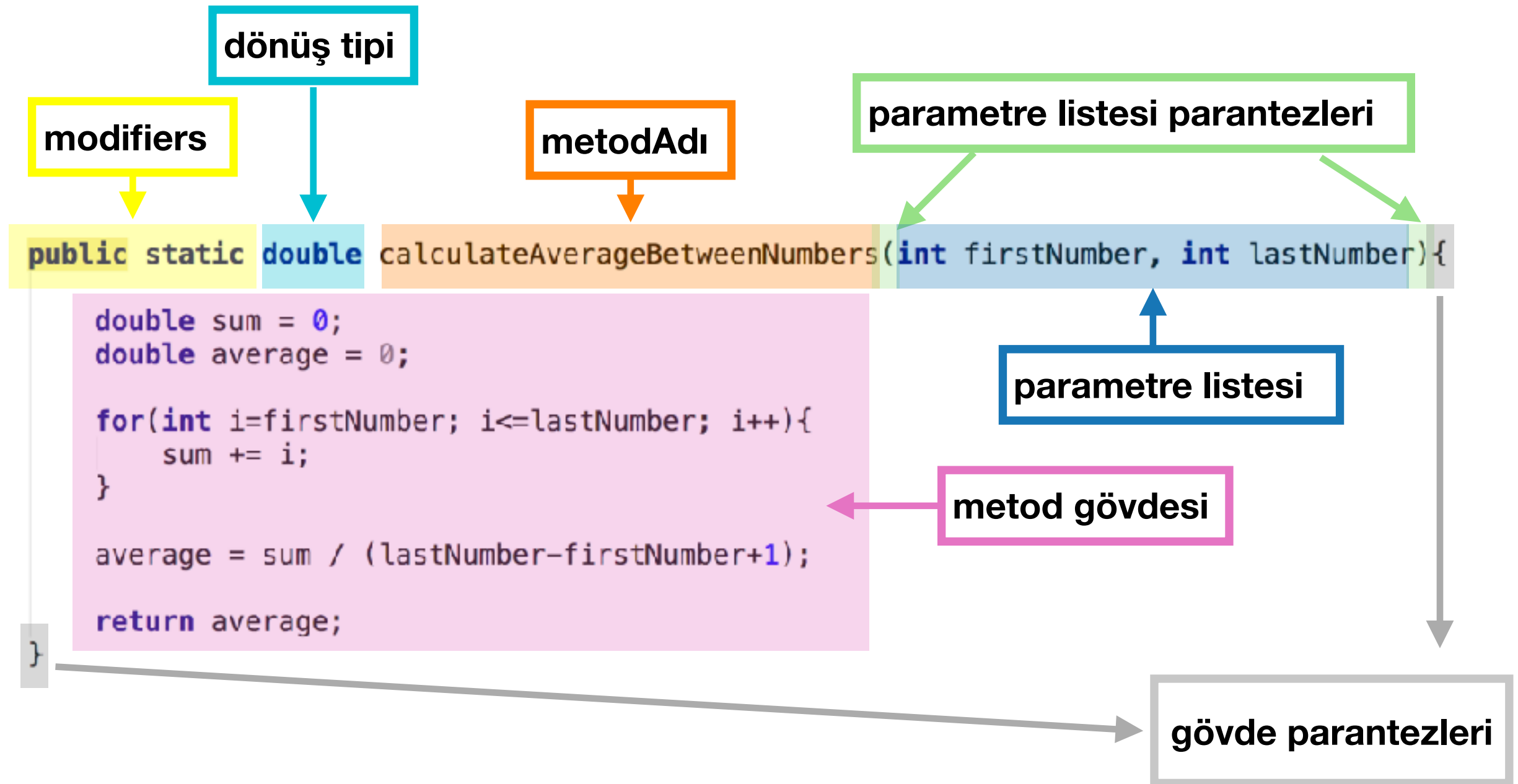
```
public class AverageOfNumbersWithMethod {  
    public static double calculateAverageBetweenNumbers(int firstNumber, int lastNumber){  
        double sum = 0;  
        double average = 0;  
  
        for(int i=firstNumber; i<=lastNumber; i++){  
            sum += i;  
        }  
  
        average = sum / (lastNumber-firstNumber+1);  
  
        return average;  
    }  
  
    public static void main(String args[]) {  
        int firstNumber;  
        int lastNumber;  
  
        double average = 0;  
  
        firstNumber = 2;  
        lastNumber = 11;  
  
        average = calculateAverageBetweenNumbers(firstNumber, lastNumber);  
  
        System.out.printf("\nAverage of integers between %d and %d is %.2f", firstNumber, lastNumber, average);  
  
        firstNumber = 18;  
        lastNumber = 43;  
  
        average = calculateAverageBetweenNumbers(firstNumber, lastNumber);  
  
        System.out.printf("\nAverage of integers between %d and %d is %.2f", firstNumber, lastNumber, average);  
  
        firstNumber = 113;  
        lastNumber = 157;  
  
        average = calculateAverageBetweenNumbers(firstNumber, lastNumber);  
  
        System.out.printf("\nAverage of integers between %d and %d is %.2f", firstNumber, lastNumber, average);  
    }  
}
```

# Metod tanımlama

---

```
modifiers dönüşTipi metodAdı ( parametre listesi ) {  
    metod gövdesi  
}
```

# Metod tanımlama



# Metod tanımlama: dönüş tipi ve return komutu

---

- Dönüş tipi: Metoddaki yapılacak işlemler sonucunda ortaya çıkan ve programda kullanılmak üzere döndürülecek değerin tipi

dönüş tipi



```
public static double calculateAverageBetweenNumbers(int firstNumber, int lastNumber){  
    double sum = 0;  
    double average = 0;  
  
    for(int i=firstNumber; i<=lastNumber; i++){  
        sum += i;  
    }  
  
    average = sum / (lastNumber-firstNumber+1);  
  
    return average;  
}
```



# Metod tanımlama: dönüş tipi ve return komutu

---

- Dönüş tipi: Metoddaki yapılacak işlemler sonucunda ortaya çıkan ve programda kullanılmak üzere döndürülecek değerin tipi

dönüş tipi

```
public static double calculateAverageBetweenNumbers(int firstNumber, int lastNumber){  
    double sum = 0;  
    double average = 0;  
  
    for(int i=firstNumber; i<=lastNumber; i++){  
        sum += i;  
    }  
  
    average = sum / (lastNumber-firstNumber+1);  
  
    return average;  
}
```

döndürme komutu

# Metod tanımlama: dönüş tipi ve return komutu

- Dönüş tipi: Metoddaki yapılacak işlemler sonucunda ortaya çıkan ve programda kullanılmak üzere döndürülecek değerin tipi

dönüş tipi

```
public static double calculateAverageBetweenNumbers(int firstNumber, int lastNumber){  
    double sum = 0;  
    double average = 0;  
  
    for(int i=firstNumber; i<=lastNumber; i++){  
        sum += i;  
    }  
  
    average = sum / (lastNumber-firstNumber+1);  
  
    return average;  
}
```

döndürülecek değişken

döndürme komutu

# Metod tanımlama: dönüş tipi ve return komutu

- Dönüş tipi: Metoddaki yapılacak işlemler sonucunda ortaya çıkan ve programda kullanılmak üzere döndürülecek değerin tipi

dönüş tipi

```
public static double calculateAverageBetweenNumbers(int firstNumber, int lastNumber){  
    double sum = 0;  
    double average = 0;  
    for(int i=firstNumber; i<=lastNumber; i++){  
        sum += i;  
    }  
    average = sum / (lastNumber-firstNumber+1);  
    return average;  
}
```

döndürülecek değişken (tipi dönüş tipiyle aynı olmalı)

döndürme komutu

# Metod tanımlama: void (boş) dönüş tipi

---

- Eğer metod herhangi bir değer döndürmüyorsa dönüş tipi void olarak tanımlanır.

```
public static void printNumbersInTheInterval(int firstNumber, int lastNumber){  
    System.out.printf("\nNumbers from %d to %d are : ",firstNumber, lastNumber);  
  
    for(int i=firstNumber; i<=lastNumber; i++){  
        System.out.print(i + " ");  
    }  
}
```

dönüş tipi void olduğu için return komutunun yazılmasına gerek yok

# Metod tanımlama: parametre listesi

- İstediğimiz kadar parametre tanımlayabiliriz. Her bir parametrenin tipi ve adı belirtilmelidir.

1. parametrenin tipi

2. parametrenin tipi

```
public static double calculateAverageBetweenNumbers(int firstNumber, int lastNumber){  
    double sum = 0;  
    double average = 0;  
    for(int i=firstNumber; i<=lastNumber; i++){  
        sum += i;  
    }  
    average = sum / (lastNumber-firstNumber+1);  
    return average;  
}
```

1. parametrenin adı

2. parametrenin adı

# Metod tanımlama: parametre listesi

- Metod çağırıldığında parametre yerine bir değer verilir. Bu değerlere argüman denir.

```
public static void main(String args[]) {  
    int firstNumber;  
    int lastNumber;  
  
    double average = 0;  
  
    firstNumber = 2;  
    lastNumber = 11;  
  
    average = calculateAverageBetweenNumbers(firstNumber, lastNumber);  
    System.out.printf("\nAverage of integers between %d and %d is %.2f", firstNumber, lastNumber, average);  
  
    firstNumber = 18;  
    lastNumber = 43;  
  
    average = calculateAverageBetweenNumbers(firstNumber, lastNumber);  
    System.out.printf("\nAverage of integers between %d and %d is %.2f", firstNumber, lastNumber, average);  
  
    firstNumber = 113;  
    lastNumber = 157;  
  
    average = calculateAverageBetweenNumbers(firstNumber, lastNumber);  
    System.out.printf("\nAverage of integers between %d and %d is %.2f", firstNumber, lastNumber, average);  
}
```

The diagram illustrates the concept of arguments and their types in the context of the provided code. A light blue box labeled "argümanlar" (arguments) has two arrows pointing to the parameters `firstNumber` and `lastNumber` in the `calculateAverageBetweenNumbers` method calls. Below these, two boxes labeled "tipi int olmalı" (type should be int) are shown. An orange arrow points from the first box to the `%d` format specifier corresponding to `firstNumber`, and a blue arrow points from the second box to the `%d` format specifier corresponding to `lastNumber`. This indicates that the values passed as arguments must be of type `int`.

# Metodlar: Kod takibi

```
public static double calculateAverageBetweenNumbers(int firstNumber, int lastNumber){  
    double sum = 0;  
    double average;  
  
    for(int i=firstNumber; i<=lastNumber; i++){  
        sum += i;  
    }  
  
    average = sum / (lastNumber-firstNumber+1);  
  
    return average;  
}
```

```
public static void main(String args[]) {  
    int a;  
    int b;  
  
    double avr;  
  
    a = 2;  
    b = 11;  
  
    avr = calculateAverageBetweenNumbers(a,b);  
  
    System.out.printf("\nAverage of integers between %d and %d is %.2f",  
        a, b, avr);  
}
```


a ve b değişkenlerini tanımla



# Metodlar: Kod takibi

```
public static double calculateAverageBetweenNumbers(int firstNumber, int lastNumber){  
    double sum = 0;  
    double average;  
  
    for(int i=firstNumber; i<=lastNumber; i++){  
        sum += i;  
    }  
  
    average = sum / (lastNumber-firstNumber+1);  
  
    return average;  
}
```

```
public static void main(String args[]) {  
    int a;  
    int b;  
    double avr;  
    a = 2;  
    b = 11;  
    avr = calculateAverageBetweenNumbers(a,b);  
    System.out.printf("\nAverage of integers between %d and %d is %.2f",  
        a, b, avr);  
}
```



avr değişkenini tanımla



# Metodlar: Kod takibi

```
public static double calculateAverageBetweenNumbers(int firstNumber, int lastNumber){  
    double sum = 0;  
    double average;  
  
    for(int i=firstNumber; i<=lastNumber; i++){  
        sum += i;  
    }  
  
    average = sum / (lastNumber-firstNumber+1);  
  
    return average;  
}
```

```
public static void main(String args[]) {  
    int a;  
    int b;  
  
    double avr;  
  
    a = 2;  
    b = 11;  
  
    avr = calculateAverageBetweenNumbers(a,b);  
  
    System.out.printf("\nAverage of integers between %d and %d is %.2f",  
        a, b, avr);  
}
```

a'nın değerini 2 yap

# Metodlar: Kod takibi

```
public static double calculateAverageBetweenNumbers(int firstNumber, int lastNumber){  
    double sum = 0;  
    double average;  
  
    for(int i=firstNumber; i<=lastNumber; i++){  
        sum += i;  
    }  
  
    average = sum / (lastNumber-firstNumber+1);  
  
    return average;  
}
```

```
public static void main(String args[]) {  
    int a;  
    int b;  
  
    double avr;  
  
    a = 2;  
    b = 11;  
    avr = calculateAverageBetweenNumbers(a,b);  
  
    System.out.printf("\nAverage of integers between %d and %d is %.2f",  
        a, b, avr);  
}
```



b'nin değerini 11 yap

# Metodlar: Kod takibi

```
public static double calculateAverageBetweenNumbers(int firstNumber, int lastNumber){  
    double sum = 0;  
    double average;  
  
    for(int i=firstNumber; i<=lastNumber; i++){  
        sum += i;  
    }  
  
    average = sum / (lastNumber-firstNumber+1);  
  
    return average;  
}
```

```
public static void main(String args[]) {  
    int a;  
    int b;  
  
    double avr;  
  
    a = 2;  
    b = 11;  
  
    avr = calculateAverageBetweenNumbers(a,b);  
  
    System.out.printf("\nAverage of integers between %d and %d is %.2f",  
        a, b, avr);  
}
```

calculateAverageBetweenNumbers  
metodunu a ve b değerleri ile çağır

# Metodlar: Kod takibi

```
public static double calculateAverageBetweenNumbers(int firstNumber, int lastNumber){  
  
    double sum = 0;  
    double average;  
  
    for(int i=firstNumber; i<=lastNumber; i++){  
        sum += i;  
    }  
  
    average = sum / (lastNumber-firstNumber+1);  
  
    return average;  
}
```


a'nın değerini firstNumber'a ver  
b'nin değerini secondNumber'a ver

```
public static void main(String args[]) {  
  
    int a;  
    int b;  
  
    double avr;  
  
    a = 2;  
    b = 11;  
  
    avr = calculateAverageBetweenNumbers(a,b);  
  
    System.out.printf("\nAverage of integers between %d and %d is %.2f",  
        a, b, avr);  
}
```

calculateAverageBetweenNumbers  
metodunu a ve b değerleri ile çağır

# Metodlar: Kod takibi

```
public static double calculateAverageBetweenNumbers(int firstNumber, int lastNumber){  
    double sum = 0;  
    double average;  
  
    for(int i=firstNumber; i<=lastNumber; i++){  
        sum += i;  
    }  
  
    average = sum / (lastNumber-firstNumber+1);  
  
    return average;  
}
```



sum ve average değişkenlerini tanımla

```
public static void main(String args[]) {  
  
    int a;  
    int b;  
  
    double avr;  
  
    a = 2;  
    b = 11;  
  
    avr = calculateAverageBetweenNumbers(a,b);  
  
    System.out.printf("\nAverage of integers between %d and %d is %.2f",  
        a, b, avr);  
  
}
```

# Metodlar: Kod takibi

```
public static double calculateAverageBetweenNumbers(int firstNumber, int lastNumber){  
  
    double sum = 0;  
    double average;  
  
    for(int i=firstNumber; i<=lastNumber; i++){  
        sum += i;  
    }  
  
    average = sum / (lastNumber-firstNumber+1);  
  
    return average;  
}
```

2'den 11'e kadar 1'er atırarak ve her bir adımda sum değerine i değerini ekleyerek for döngüsünü çalıştır

```
public static void main(String args[]) {  
  
    int a;  
    int b;  
  
    double avr;  
  
    a = 2;  
    b = 11;  
  
    avr = calculateAverageBetweenNumbers(a,b);  
  
    System.out.printf("\nAverage of integers between %d and %d is %.2f",  
        a, b, avr);  
}
```

# Metodlar: Kod takibi


```
public static double calculateAverageBetweenNumbers(int firstNumber, int lastNumber){  
    double sum = 0;  
    double average;  
  
    for(int i=firstNumber; i<=lastNumber; i++){  
        sum += i;  
    }  
    average = sum / (lastNumber-firstNumber+1);  
    return average;  
}
```

ortalama değeri hesapla(6.5) ve  
average değişkenine ata

```
public static void main(String args[]) {  
    int a;  
    int b;  
  
    double avr;  
  
    a = 2;  
    b = 11;  
  
    avr = calculateAverageBetweenNumbers(a,b);  
  
    System.out.printf("\nAverage of integers between %d and %d is %.2f",  
        a, b, avr);  
}
```

# Metodlar: Kod takibi

```
public static double calculateAverageBetweenNumbers(int firstNumber, int lastNumber){  
    double sum = 0;  
    double average;  
  
    for(int i=firstNumber; i<=lastNumber; i++){  
        sum += i;  
    }  
  
    average = sum / (lastNumber-firstNumber+1);  
    return average;  
}
```



average değerini(6.5) döndür

```
public static void main(String args[]) {  
    int a;  
    int b;  
  
    double avr;  
  
    a = 2;  
    b = 11;  
  
    avr = calculateAverageBetweenNumbers(a,b);  
  
    System.out.printf("\nAverage of integers between %d and %d is %.2f",  
        a, b, avr);  
}
```



# Metodlar: Kod takibi

```
public static double calculateAverageBetweenNumbers(int firstNumber, int lastNumber){  
    double sum = 0;  
    double average;  
  
    for(int i=firstNumber; i<=lastNumber; i++){  
        sum += i;  
    }  
  
    average = sum / (lastNumber-firstNumber+1);  
  
    return average;  
}
```

```
public static void main(String args[]) {  
    int a;  
    int b;  
  
    double avr;  
  
    a = 2;  
    b = 11;  
  
    avr = calculateAverageBetweenNumbers(a,b);  
  
    System.out.printf("\nAverage of integers between %d and %d is %.2f",  
        a, b, avr);  
}
```

Metoddan dönen 6.5 değerini  
avr değişkenine ata

# Metodlar: Kod takibi

```
public static double calculateAverageBetweenNumbers(int firstNumber, int lastNumber){  
    double sum = 0;  
    double average;  
  
    for(int i=firstNumber; i<=lastNumber; i++){  
        sum += i;  
    }  
  
    average = sum / (lastNumber-firstNumber+1);  
  
    return average;  
}
```

```
public static void main(String args[]) {  
  
    int a;  
    int b;  
  
    double avr;  
  
    a = 2;  
    b = 11;  
  
    avr = calculateAverageBetweenNumbers(a,b);  
  
    System.out.printf("\nAverage of integers between %d and %d is %.2f",  
        a, b, avr);  
}
```

Yazdırma komutunu çalıştır

# Metodlar: Call stack

```
public static int findMaximum(int number1, int number2, int number3){  
    int maximum;  
    maximum = number1;  
    if(number2 > maximum)  
        maximum = number2;  
    if(number3 > maximum)  
        maximum = number3;  
    return maximum;  
}  
  
public static void main(String args[]){  
    int x = 10;  
    int y = 8;  
    int z = 25;  
    int max;  
    max = findMaximum(x,y,z);  
    System.out.printf("Maximum of %d, %d and %d is %d", x,y,z,max);  
}
```

main metodu için  
gerekli alan

max

z

y

x

**main metodu  
çağırıldığında**

# Metodlar: Call stack

```
public static int findMaximum(int number1, int number2, int number3){  
    int maximum;  
    maximum = number1;  
    if(number2 > maximum)  
        maximum = number2;  
    if(number3 > maximum)  
        maximum = number3;  
    return maximum;  
}  
  
public static void main(String args[]){  
    int x = 10;  
    int y = 8;  
    int z = 25;  
    int max;  
    max = findMaximum(x,y,z);  
    System.out.printf("Maximum of %d, %d and %d is %d", x,y,z,max);  
}
```

findMaximum metodu için gerekli alan

number3	25
number2	8
number1	10

main metodu için gerekli alan

max	
z	25
y	8
x	10

**findMaximum metodu çağırıldığında**

# Metodlar: Call stack

```
public static int findMaximum(int number1, int number2, int number3){  
    int maximum;  
    maximum = number1;  
    if(number2 > maximum)  
        maximum = number2;  
    if(number3 > maximum)  
        maximum = number3;  
    return maximum;  
}  
  
public static void main(String args[]){  
    int x = 10;  
    int y = 8;  
    int z = 25;  
    int max;  
    max = findMaximum(x,y,z);  
    System.out.printf("Maximum of %d, %d and %d is %d", x,y,z,max);  
}
```

findMaximum metodu için gerekli alan

maximum	
number3	25
number2	8
number1	10

main metodu için gerekli alan

max	
z	25
y	8
x	10

**findMaximum metodu**

# Metodlar: Call stack

```
public static int findMaximum(int number1, int number2, int number3){  
    int maximum;  
    maximum = number1;  
    if(number2 > maximum)  
        maximum = number2;  
    if(number3 > maximum)  
        maximum = number3;  
    return maximum;  
}  
  
public static void main(String args[]){  
    int x = 10;  
    int y = 8;  
    int z = 25;  
    int max;  
    max = findMaximum(x,y,z);  
    System.out.printf("Maximum of %d, %d and %d is %d", x,y,z,max);  
}
```

findMaximum metodu  
için gerekli alan

maximum	10
number3	25
number2	8
number1	10

main metodu için  
gerekli alan

max	
z	25
y	8
x	10

***findMaximum metodu***

# Metodlar: Call stack

```
public static int findMaximum(int number1, int number2, int number3){  
    int maximum;  
    maximum = number1;  
    if(number2 > maximum)  
        maximum = number2;  
    if(number3 > maximum)  
        maximum = number3;  
    return maximum;  
}  
  
public static void main(String args[]){  
    int x = 10;  
    int y = 8;  
    int z = 25;  
    int max;  
    max = findMaximum(x,y,z);  
    System.out.printf("Maximum of %d, %d and %d is %d", x,y,z,max);  
}
```

findMaximum metodu  
için gerekli alan

maximum	10
number3	25
number2	8
number1	10

main metodu için  
gerekli alan

max	
z	25
y	8
x	10

**findMaximum metodu**

# Metodlar: Call stack

```
public static int findMaximum(int number1, int number2, int number3){  
    int maximum;  
    maximum = number1;  
    if(number2 > maximum)  
        maximum = number2;  
    if(number3 > maximum)  
        maximum = number3;  
    return maximum;  
}  
  
public static void main(String args[]){  
    int x = 10;  
    int y = 8;  
    int z = 25;  
    int max;  
    max = findMaximum(x,y,z);  
    System.out.printf("Maximum of %d, %d and %d is %d", x,y,z,max);  
}
```

findMaximum metodu  
için gerekli alan

maximum	25
number3	25
number2	8
number1	10

main metodu için  
gerekli alan

max	
z	25
y	8
x	10

**findMaximum metodu**



# Metodlar: Call stack

```
public static int findMaximum(int number1, int number2, int number3){  
    int maximum;  
    maximum = number1;  
    if(number2 > maximum)  
        maximum = number2;  
    if(number3 > maximum)  
        maximum = number3;  
    return maximum;  
}  
  
public static void main(String args[]){  
    int x = 10;  
    int y = 8;  
    int z = 25;  
    int max;  
    max = findMaximum(x,y,z);  
    System.out.printf("Maximum of %d, %d and %d is %d", x,y,z,max);  
}
```

findMaximum metodu için gerekli alan

maximum	25
number3	25
number2	8
number1	10

main metodu için gerekli alan

max	25
z	25
y	8
x	10

*findMaximum metodunda return satırı çağırıldığında*

# Metodlar: Call stack

```
public static int findMaximum(int number1, int number2, int number3){  
  
    int maximum;  
  
    maximum = number1;  
  
    if(number2 > maximum)  
        maximum = number2;  
  
    if(number3 > maximum)  
        maximum = number3;  
  
    return maximum;  
  
}
```

```
public static void main(String args[]){  
  
    int x = 10;  
    int y = 8;  
    int z = 25;  
  
    int max;  
  
    max = findMaximum(x,y,z);  
  
    System.out.printf("Maximum of %d, %d and %d is %d", x,y,z,max);  
  
}
```

main metodu için  
gerekli alan

max	25
z	25
y	8
x	10

*findMaximum metodu  
bitti*