

JAVA ile Programcılığa Giriş

1. Hafta 1. gün

Giriş, Netbeans kurulumu

Veri ve Değişkenler, Aritmetik Hesaplar

Environmental vars

JDK

JAVAHOME

Hello World programı

Kitabın download ve tanıtımı

Birkaç örnek çalıştır, incele

NETBEANS tanıtımı - ileri örnek seçerek

Kitaptan Standalone compile

Data and Variables [Veri ve Değişkenler]

Naming Your Variables

Variables Names and Unicode

Variables and Types

Integer Data types

Integer Literals

Declaring Integer Variables

Floating Point Data Types

Floating Point Literals

Declaring floating Point Variables

Fixing the value of a variable

Arithmetic Calculations [Aritmetik hesaplar]

Integer calculations

EXAMPLE: Apples and Oranges – FRUIT

Integer division and Remainders

The Increment and Decrement Operators

Computation with shorter Integer types

Errors in integer arithmetic

Floating Point calculations

EXAMPLE-AVERAGE FRUIT

Other Floating Point arithmetic Operators

Error conditions in Floating Point Arithmetic

Mixed Arithmetic expressions

Explicit Casting [Belirli Eşdüşürmeler]

Automatic type conversions in Assignments

The op= operators

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Mathmetical functions and Constants [Matematiksel fonksiyonlar ve sabitler]

EXAMPLE- the Math Class –PondRadius

Importing the MathClass Methods

Storing characters [Harflerin saklanması]

Character Escape Sequences

Character arithmetic

EXAMPLE- Arithmetic with Character Codes – CHARCODECALCS

Bitwise Operations [Bit bazlı işlemler]

Using the AND OR Operators

EXAMPLE- Bitwise AND and OR operations-BITWISEOPS

Using the Exclusive OR operator

Shift Operations

EXAMPLE-Using shift Operations-PACKING CHARACTERS

Methods for Bitwise operations

EXAMPLE- Methods for Bitwise operations-TRYBITMETHODS

Variables with a fixed set of integer values

EXAMPLE-Using enumeration- TRYENUMERATION

Boolean variables

Operator precedence

Program comments

Documentation Comments

1. hafta 2. gün

Loops and Logic [Çevrimler ve Mantık]

Exceptions [İstisnalar]

Making Decisions [Karar verme durumları]

Making Comparisons

The if statement [Eğer komutu]

Statement blocks

The else clause

ÖRNEK-NumberCheck

Nested if statements

ÖRNEK-LetterCheck Hardway

Comparing enumeration values

Logical operators [Mantıksal İşleyiciler]

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Logical AND operations

ÖRNEK-LetterCheck Easyway

Logical OR operations

Boolean NOT operations

Character Testing Using Standard Library Operations

ÖRNEK-LetterCheck Trivially

The Conditional Operator

ÖRNEK-ConditionalOp

The Switch Statement

The General Case of the Switch Statement

ÖRNEK-Tryswitch (missing – copy paste)

Variable Scope [Değişken etki alanı]

ÖRNEK-Scope

Loops

ÖRNEK-ForLoop

Counting Using Floating Point Values

ÖRNEK-CollectionForLoop(missing copy paste)

While Loop

ÖRNEK-WhileLoop

ÖRNEK-DoWhileLoop

Nested Loops

ÖRNEK-Factorial

The continue Statement [Devam et komutu]

The labeled continue statement

ÖRNEK-Factorial JAVA

Using the break Statement in a Loop

ÖRNEK-Primes1

ÖRNEK-Primes2

ÖRNEK-FindPrimes

The Labeled break Statement

Assertions [İddialar]

More Complex Assertions

ÖRNEK-TryAssertions

Exceptions [İstisnalar]

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The Idea Behind Exceptions

Types of Exceptions

Error Exceptions

RuntimeException Exceptions

Other Subclasses of Exception

Dealing with Exceptions [İstisnalarla ilgilenmek]

Specifying the Exceptions a Method Can Throw

Handling Exceptions

The try Block [Dene bloğu]

The catch Block

ÖRNEK – TestTryCatch

ÖRNEK – TestLoopTryCatch

Multiple catch Blocks

The finally Block

Structuring a Method [Bir metodu yapılandırma]

Execution Sequence

ÖRNEK- TryBlockTest

Normal Execution of a Method

Execution When an Exception Is Thrown

Execution When an Exception Is Not Caught

Nested try Blocks[İç içe dene blokları]

Rethrowing Exceptions

Exception Objects [İstisna nesneleri]

The Throwable Class

ÖRNEK - Dishing the Dirt on Exceptions

Standard Exceptions

Defining Your Own Exceptions [Kendi istisnalarınızı belirlemek]

Defining an Exception Class

Throwing Your Own Exception

An Exception Handling Strategy

An Example of an Exception Class

ÖRNEK – ZeroDivideException

2. Hafta 1. gün

Arrays and Strings [Diziler ve Harf zincirleri]

Collections [Kolleksiyonlar]

Arrays [Diziler]

Array Variables
Defining an Array
The Length of an Array
Accessing Array Elements
Reusing Array Variables
Initializing Arrays
Using a Utility Method to Initialize an Array
Initializing an Array Variable
Using Arrays
Using the Collection-Based for Loop with an Array

ÖRNEK: Even More Primes

Arrays of Arrays

ÖRNEK: The Weather Fanatic

Arrays of Arrays of Varying Length

Multidimensional Arrays

Arrays of Characters

Strings [Harf zincirleri]

String Literals
Creating String Objects
Arrays of Strings

ÖRNEK: Twinkle, Twinkle, Lucky Star

Operations on Strings [harf zincirleri üzerinde işlemler]

Joining Strings
ÖRNEK: String Concatenation
Comparing Strings
ÖRNEK: Two Strings, Identical but Not the Same
Comparing Strings for Equality
ÖRNEK: String Identity
String Interning
Checking the Start and End of a String
Sequencing Strings
ÖRNEK: Ordering Strings
Accessing String Characters
Extracting String Characters
ÖRNEK: Getting at Characters in a String
Searching Strings for Characters
Searching for Substrings
ÖRNEK: Exciting Concordance Entries
Extracting Substrings
ÖRNEK: Word for Word

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Tokenizing a String

ÖRNEK: Using a Tokenizer

Modified Versions of String Objects

Creating Character Arrays from String Objects

Using the Collection-Based for Loop with a String

Obtaining the Characters in a String as an Array of Bytes

Creating String Objects from Character Arrays

Mutable Strings [Eğilebilir harf zincirleri]

Creating StringBuffer Objects

The Capacity of a StringBuffer Object

Changing the String Length for a StringBuffer Object

Adding to a StringBuffer Object

Appending a Substring

Appending Basic Types

Finding the Position of a Substring

Replacing a Substring in the Buffer

Inserting Strings

Extracting Characters from a Mutable String

Other Mutable String Operations

Creating a String Object from a StringBuffer Object

ÖRNEK: Using a StringBuffer Object to Assemble a String

2. Hafta 2. gün

Collections [Kolleksiyonlar]

Understanding the Collections Framework [Kolleksiyonlar çerçevesini anlamak]

Collections of Objects [Nesnelerden oluşan kolleksiyonlar]

Sets

Sequences

Maps

Hashing

Iterators [tekrarlayıcılar]

List Iterators

Collection Classes [Kolleksiyon sınıflamaları]

Collection Interfaces

Using Vectors [Vektörleri kullanmak]

Creating a Vector

ÖRNEK: Using a Vector

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The Capacity and Size of a Vector

Storing Objects in a Vector

Retrieving Objects from a Vector

Accessing Elements in a Vector through a List Iterator

Extracting All the Elements from a Vector

Removing Objects from a Vector

Searching a Vector

Applying Vectors

ÖRNEK: Creating the Crowd

Sorting a Collection

ÖRNEK: Sorting the Stars

Stack Storage

ÖRNEK: Dealing Cards

Linked Lists [Bağlı listeler]

ÖRNEK: Using a Genuine Linked List

Using Maps [Haritaları kullanmak]

The Hashing Process

Using Your Own Class Objects as Keys

Generating Hashcodes

Creating a HashMap Container

Storing, Retrieving, and Removing Objects

Processing all the Elements in a Map

ÖRNEK: Using a HashMap Map

ÖRNEK: Storing a Map in a File

3. Hafta 1. gün

Defining Classes [Sınıflamaları tanımlamak]

Extending Classes and Inheritance [Sınıflamaları genişletmek ve kalıtım]

What Is a Class? [Sınıflama nedir?]

Fields in a Class Definition

Methods in a Class Definition

Accessing Variables and Methods

Defining Classes [Sınıflamaları tanımlamak]

Defining Methods [Metodları tanımlamak]

Returning from a Method

The Parameter List

How Argument Values Are Passed to a Method

Final Parameters

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Defining Class Methods

Accessing Class Data Members in a Method

The Variable this

Initializing Data Members

Using Initialization Blocks

ÖRNEK: Using an Initialization Block

Constructors [Kurucular]

The Default Constructor

Creating Objects of a Class

Passing Objects to a Method

The Lifetime of an Object

Defining and Using a Class [Bir sınıfı tanımlamak ve kullanmak]

ÖRNEK: Using the Sphere Class

Method Overloading [Metod aşırı yükleme]

Multiple Constructors

ÖRNEK: Multiple Constructors for the Sphere Class

Calling a Constructor from a Constructor

Duplicating Objects Using a Constructor

Using Objects [Nesneleri kullanmak]

ÖRNEK: The Point Class

ÖRNEK: The Line Class

Creating a Point from Two Lines

ÖRNEK: Calculating the Intersection of Two Lines

ÖRNEK: The TryGeometry Class

Recursion [Kendi kendini çağırma]

ÖRNEK: Calculating Powers

Understanding Packages [Paketleri anlamak]

Packaging Up Your Classes

Packages and the Directory Structure

Compiling a Package

Accessing a Package

Using Extensions

Adding Classes from a Package to Your Program

Packages and Names in Your Programs

Importing Static Class Members

Standard Packages

Standard Classes Encapsulating the Primitive Data Types

ÖRNEK: Autoboxing in Action

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Controlling Access to Class Members [Sınıflama unsurlarına erişimi kontrol etmek]

Using Access Attributes

Specifying Access Attributes

ÖRNEK: Accessing the Point Class

Choosing Access Attributes

Using Package and Access Attributes

ÖRNEK: Packaging Up the Line and Point Classes

ÖRNEK: Testing the Geometry Package

Nested Classes [İç içe sınıflamalar]

Static Nested Classes

ÖRNEK: Rabbits out of Hats

Using a Non-Static Nested Class

ÖRNEK: Accessing the Top-Level Class Members

Using a Nested Class Outside the Top-Level Class

ÖRNEK: Free-Range Rabbits (Almost)

Local Nested Classes

The finalize() Method [Sonlandırma metodu]

Native Methods [Yapısal metodlar]

3. Hafta 2. gün

Extending Classes and Inheritance [Sınıflamaları genişletme ve kalıtım]

Using Existing Classes [Varolan sınıflamaları kullanmak]

Class Inheritance [Sınıflama kalıtımı]

Inheriting Data Members

Hidden Data Members

Inherited Methods

Objects of a Derived Class

Deriving a Class

Derived Class Constructors

Calling the Base Class Constructor

ÖRNEK: Testing a Derived Class

Overriding a Base Class Method

ÖRNEK: Overriding a Base Class Method

ÖRNEK: Calling a Base Class Method from a Derived Class

Choosing Base Class Access Attributes [Temel sınıflama erişim özelliklerini seçmek]

Polymorphism [Çok yüzlülük]

Using Polymorphism

ÖRNEK: Enhancing the Dog Class

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Multiple Levels of Inheritance [Birden çok seviyeli kalıtım]

ÖRNEK: A Spaniel Class

Abstract Classes [Soyut sınıflamalar]

The Universal Superclass [evrensel süper sınıflama]

The `toString()` Method

Determining the Type of an Object

Copying Objects

Methods Accepting a Variable Number of Arguments [Değişken sayıda parametre kabul eden metodlar]

ÖRNEK: Displaying Any Old Arguments

Limits the Types in a Variable Argument List

ÖRNEK: Limiting the Types Allowed in a Variable Argument List

Casting Objects [Nesneleri denk düşürme]

When to Cast Objects

ÖRNEK: Casting Down to Lay an Egg

Identifying Objects

More on Enumerations [sayılandırmalar üzerine]

Adding Members to an Enumeration Class

ÖRNEK: Embroidering an Enumeration

Designing Classes [Sınıflamaları tasarlamak]

A Classy Example

Designing the PolyLine Class

ÖRNEK: The ListPoint Class

ÖRNEK: The PolyLine Class

ÖRNEK: Using PolyLine Objects

A General-Purpose Linked List

Defining a Linked List Class

ÖRNEK: Using the General Linked List

Using the final Modifier [sonlandırma değiştiricisini kullanmak]

Interfaces [Arayüzler]

Encapsulating Constants in a Program

Constants in an Interface

Constants Defined in a Class

ÖRNEK: Importing Constants into a Program

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Interfaces Declaring Methods

ÖRNEK: Implementing an Interface

A Partial Interface Implementation

Extending Interfaces

Interfaces and Multiple Inheritance

Using Interfaces

Interfaces and Polymorphism

ÖRNEK: Defining Interfaces

ÖRNEK: Polymorphism Using an Interface Type

Using Multiple Interfaces

Method Parameters of Interface Types

Nesting Classes in an Interface Definition

Interfaces and the Real World

Anonymous Classes [İsimsiz sınıflamalar]

4. Hafta 1. gün

Understanding Streams [Veri akımlarını anlamak]

Accessing Files and Directories [Dosyalar ve kütüphanelere erişim]

Understanding Streams [Veri akımlarını anlamak]

Input and Output Streams

Binary and Character Streams

The Classes for Input and Output [Giriş ve çıkış sınıflamaları]

Basic Input Stream Operations

Basic Output Stream Operations

Stream Readers and Writers

Using Readers

Using Writers

The Standard Streams [Standart Veri akımları]

Getting Data from the Keyboard

Tokenizing a Stream

Customizing a Stream Tokenizer

ÖRNEK: Creating a Formatted Input Class

ÖRNEK: Formatted Keyboard Input

Writing to the Command Line

The printf() Method

Formatting Numerical Data

Specifying the Width and Precision

Formatting Characters and Strings

The Locale Class

Formatting Data into a String

Accessing Files and Directories [Dosyalara ve kütüphanelere erişim]

Working with File Objects [Dosya nesneleri ile çalışmak]

Creating File Objects

Portable Path Considerations

Absolute and Relative Paths

Accessing System Properties

ÖRNEK: Getting the Default System Properties

Setting System Properties

Testing and Checking File Objects

Querying Files and Directories

ÖRNEK: Testing for a File

ÖRNEK: Getting More Information

Filtering a File List

ÖRNEK: Using the FilenameFilter Interface

Creating and Modifying Files and Directories

Creating File Output Streams [Dosya çıkış veri akımlarının oluşturulması]

Ensuring a File Exists

ÖRNEK: Ensuring That a File Exists

Avoiding Overwriting a File

ÖRNEK: Avoiding Overwriting a File

FileDescriptor Objects

4. Hafta 2. gün

Writing Files [Dosyaların yazılışı]

Reading Files [Dosyaların okunuşu]

File I/O Basics [Dosya G/C temelleri]

File Input and Output [Dosya giriş ve çıkışı]

Channels [Kanallar]

Channel Operations

File Channels

Buffers [Tamponlar]

Buffer Capacity

Buffer Position and Limit

Setting the Position and Limit

Creating Buffers

View Buffers

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Duplicating and Slicing Buffers

Creating Buffers by Wrapping Arrays

Wrapping Strings

Marking a Buffer

Buffer Data Transfers

Transferring Data into a Buffer

Using View Buffers

Preparing a Buffer for Output to a File

Writing to a File [Bir dosyaya yazmak]

File Position

ÖRNEK: Using a Channel to Write a String to a File

Using a View Buffer to Load Data into a Byte Buffer

ÖRNEK: Writing a String as Bytes

Writing Varying Length Strings to a File

ÖRNEK: Writing Multiple Strings to a File

Using a Formatter Object to Load a Buffer

ÖRNEK: Using a Formatter Object to Load a Buffer

Direct and Indirect Buffers

Writing Numerical Data to a File

ÖRNEK: Writing Primes to a File

Writing Mixed Data to a File

ÖRNEK: Using Multiple View Buffers

ÖRNEK: Multiple Records in a Buffer

Gathering-Write Operations

ÖRNEK: The Gathering Write

Reading Files [Dosya okumak]

File Read Operations

Creating File Input Streams

File Channel Read Operations

Reading a Text File

Getting Data from the Buffer

ÖRNEK: Reading Text from a File

Reading Binary Data

ÖRNEK: Reading a Binary File

Reading Mixed Data

ÖRNEK: Reading Mixed Data from a File

Compacting a Buffer

ÖRNEK: Reading into a Large Buffer

Copying Files

ÖRNEK: Direct Data Transfer between Channels

Random Access to a File

ÖRNEK: Reading a File Randomly

ÖRNEK: Reading and Writing a File Randomly

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Read/Write Operations with a Single File Channel

Memory-Mapped Files

ÖRNEK: Using a Memory-Mapped File

Locking a File

Locking Part of a File

Practical File Locking Considerations

ÖRNEK: Using a File Lock

5. Hafta 1. Gün

(Zaman kalması durumunda)

DBASE

DBASE (kurulum, erişim)

Install MySQL

Install TOAD

Define a table

Load the table

ODBC, JDBC drivers

getConnection

Class.forName("com.mysql.jdbc.Driver")

DriverManager.getConnection

ÖRNEK: ReadFile, WriteFile

prepareDBdata

getEntryByWord

closeConnection

5. Hafta 2. Gün

(Zaman kalması durumunda)

Eclipse IDE kurmak ve tanımk

JAVA applet