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

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

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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 işleyiciler]

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]

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

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 çerçeve yapısını 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

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

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*

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*

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4. Hafta 2. gün

Writing Files [Dosyaların yazılışı]

Reading Files [Dosyaların okunuşu]

File I/O Basics [Dosya G/Ç 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*

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 tanımak
JAVA applet