30 seconds of Java

Inspired by [30 seconds of code](#), this is a collection of reusable tested copy-pasteable Java 17 compatible code snippets that you can understand in 30 seconds or less.

If you're interested in contributing to this library, please see the [instructions](#).

Algorithms

Basic sorting and searching algorithms to use in your projects.

Includes:

1. Binary search
2. Bubble sort
3. Counting sort
4. Cycle sort
5. Insertion sort
6. Linear search
7. Merge sort
8. Quick sort
9. Selection sort
10. Sieve of Eratosthenes (search)

Array operations

Basic operations on arrays

Includes:

1. All equal:
2. Array concatenation
3. Array meanReturns the mean of the integers in the array.
4. Array median
5. Array sum
6. Find max
7. Find min
8. Multi array concatenation
9. Reverse array

Class operations

Basic operations on classes

Includes:

1. Create object using reflection
2. Get all field names
3. Get all methods
4. Get all public field names

Date

Basic operations with dates

Includes:

1. Add days to date
2. Difference of dates

Encoding & decoding

Basic encoding and decoding operations

Includes:

1. Base64 encode
2. Base64 decode

File

Basic file operations

Includes:

1. List all files in directory (recursively)
2. List directories
3. List all files in directory
4. Read lines in file
5. Zip directory
6. Zip file
7. Zip multiple files

IO

Basic input/output operations

Includes:

1. Input stream to string
2. Read file

Math

Basic mathematical operations

Includes:

1. Elo rating
2. Factorial
3. Fibonacci
4. Greatest common divisor
5. Haversine formula
6. Least common multiple
7. Luhn checksum
8. Natural number binary conversion
9. Lottery simulation
10. Prime number check

Media

Basic media operations

Includes:

1. Screen capture

Network

Basic network operations

Includes:

1. Get request
2. Post request

String

Basic string operations

Includes:

1. Anagram check
2. Common letters check
3. Version comparison
4. Levenshtein distance finding
5. Maximum character count
6. Palindrom check
7. String reverse
8. String to date converter

Thread

Basic thread operations

Includes:

1. Open new thread pool