

## Java String Manipulation Quick Reference

### 📄 Inspection & Info

Method	Description
length()	Number of characters
isEmpty()	True if length = 0

### 🔍 Searching

Method	Description
contains(CharSequence s)	Check substring existence
indexOf(String str)/lastIndexOf(String str)	First/last occurrence
startsWith(String prefix)/endsWith(String suffix)	Check prefix/suffix

### 🔧 Replacement & Modification

Method	Description
concat(String str)	Append string
replace(oldChar, newChar)	Replace chars
replaceAll(regex, replacement)	Replace via regex
repeat(int count)	Repeat string (Java 11+)

### 📊 Streaming (Java 8+)

Method	Description
chars()	Stream of UTF-16 code units
codePoints()	Stream of Unicode code points

### 🔤 Character Access & Code Points

Method	Description
charAt(int index)	Character at index
codePointAt(int index)	Unicode code point at index
codePointCount(int begin, int end)	Count code points in range
offsetByCodePoints(int index, int offset)	Index shift by code points

### ✂️ Extraction & Substrings

Method	Description
substring(int begin)	From begin to end
substring(int begin, int end)	Between begin (inclusive) and end (exclusive)
subSequence(int start, int end)	Return as CharSequence

### 🔪 Splitting & Lines

Method	Description
split(String regex)	Split into array
split(String regex, int limit)	Split with limit
lines()	Stream of lines (Java 11+)

### 🎨 Formatting & Joining

Method	Description
format(String fmt, Object...)	Static printf-style formatting
formatted(Object...)	Instance formatting (Java 15+)
join(CharSequence, CharSequence...)	Join with delimiter

### 🔗 Comparison & Matching

Method	Description
equals(Object other)	Case-sensitive equality
equalsIgnoreCase(String other)	Case-insensitive equality
compareTo(String another)	Lexicographical compare
matches(String regex)	Match entire string to regex
regionMatches( ... )	Compare substrings by region

### 🔠 Case Conversion & Trimming

Method	Description
toLowerCase()/toUpperCase()	Convert case
trim()/strip()	Remove leading/trailing whitespace

### 🔄 Conversion & Encoding

Method	Description
toArray()	Convert to char array
getBytes()/getBytes(Charset)	Get bytes
intern()	Return string from pool

### 📦 Static Utilities

Method	Description
valueOf(Object obj)	Convert any value to String
copyValueOf(char[] data)	Convert char array to String