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| Type | String - Method and Description |
| char | [charAt](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html#charAt(int))(int index)  Returns char value at index. |
| int | [compareTo](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html#compareTo(java.lang.String))([String](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html) str2)  Compares two strings. |
| int | [compareToIgnoreCase](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html#compareToIgnoreCase(java.lang.String))([String](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html) str)  Compares two strings, ignoring case. |
| [String](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html) | [concat](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html#concat(java.lang.String))([String](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html) str)  Concatenates str to the end of string. |
| boolean | [endsWith](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html#endsWith(java.lang.String))([String](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html) suffix)  True if string ends with the suffix. |
| boolean | [equals](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html#equals(java.lang.Object))([Object](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html) anObject)  Compares string to object. |
| boolean | [equalsIgnoreCase](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html#equalsIgnoreCase(java.lang.String))([String](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html) str2)  Case insensitive compare |
| [String](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html) | [format](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html#format(java.lang.String,%20java.lang.Object...))([String](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html) format,[Object](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html)...args)  Returns formatted string using format |
| byte[] | [getBytes](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html#getBytes())()  Encodes String into a new byte array. |
| void | [getChars](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html#getChars(int,%20int,%20char[],%20int))(int srcBegin, int srcEnd, char[] dest, int dstBegin)  Copies characters into char dest array. |
| int | [indexOf](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html#indexOf(int,%20int))(int**/str** ch**, int from)**  index of 1st ch**/string**, **starting at from** |
| boolean | [isEmpty](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html#isEmpty())()  Returns true if, and only if, [length()](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html#length()) is 0. |
| int | [lastIndexOf](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html#lastIndexOf(int,%20int))(int**/str** ch**, int from**)  index of last ch/**string**, searching from end **starting at from** |
| int | [length](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html#length())()  Returns the length of this string. |
| boolean | [matches](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html#matches(java.lang.String))([String](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html) regex)  True if string matches the [reg ex](https://docs.oracle.com/javase/7/docs/api/java/util/regex/Pattern.html#sum). |
| [String](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html) | [replace](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html#replace(char,%20char))(char oldChr, char newChr)  replace all oldChr with newChr. |
| [String](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html) | [replaceAll](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html#replaceAll(java.lang.String,%20java.lang.String))**/First**([String](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html) regex, [String](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html) replacement)  Replace all/(**1st**) substring matching [regex](https://docs.oracle.com/javase/7/docs/api/java/util/regex/Pattern.html#sum) with replacement. |
| [String](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html)[] | [split](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html#split(java.lang.String,%20int))([String](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html) regex**, int limit)**  Splits string by [regex](https://docs.oracle.com/javase/7/docs/api/java/util/regex/Pattern.html#sum), **max times** |
| boolean | [startsWith](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html#startsWith(java.lang.String,%20int))([String](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html) prefix**, int toffset**)  True if string **at index** starts with prefix |
| [String](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html) | [substring](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html#substring(int,%20int))(int begin**, int end**)  Returns string that is a substring of string. |
| char[] | [toCharArray](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html#toCharArray())()  Converts this string to a new char array. |
| [String](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html) | [toLowerCase](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html#toLowerCase())()/[toUpperCase](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html" \l "toUpperCase())()  Converts to lower/upper case. |
| [String](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html) | [trim](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html#trim())()  remove leading and trailing whitespace |
| [String](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html) | [valueOf](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html#valueOf(double))(int/num d) string representation of the argument. |

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| Type | Number - Method and Description |
| static int | [bitCount(int i)](https://docs.oracle.com/javase/7/docs/api/java/lang/Integer.html#bitCount(int))  number of one-bits in int value. |
| byte | [byteValue()](https://docs.oracle.com/javase/7/docs/api/java/lang/Integer.html#byteValue())  the value of this 'Number' as a byte. |
| static int | [compare(NUM x, NUM y)](https://docs.oracle.com/javase/7/docs/api/java/lang/Integer.html#compare(int,%20int))  Compares two numbers |
| int | compareTo(Number anotherNum)  Compares two Number numerically. |
| double | [doubleValue()](https://docs.oracle.com/javase/7/docs/api/java/lang/Integer.html#doubleValue())  value of this 'Number' as a double |
| float | [floatValue()](https://docs.oracle.com/javase/7/docs/api/java/lang/Integer.html#floatValue())  value of this 'Number' as a float |
| int | [intValue()](https://docs.oracle.com/javase/7/docs/api/java/lang/Integer.html#intValue())  value of this 'Number' as an int |
| long | [longValue()](https://docs.oracle.com/javase/7/docs/api/java/lang/Integer.html#longValue())  value of this 'Number' as a long |
| static num | parseXXX(String s)  Parses string as a Int, Double,… |
| static int | parseInt(String s, int radix)  Parses string as integer in radix |
| static int | [reverse(int i)](https://docs.oracle.com/javase/7/docs/api/java/lang/Integer.html#reverse(int))  reverse the order of the bits |
| static int | [rotateLeft(int i, int dist)](https://docs.oracle.com/javase/7/docs/api/java/lang/Integer.html#rotateLeft(int,%20int))  shift int value left distance bits |
| static int | [rotateRight(int i, int dist)](https://docs.oracle.com/javase/7/docs/api/java/lang/Integer.html#rotateRight(int,%20int))  shift int value right distance bits |
| short | [shortValue()](https://docs.oracle.com/javase/7/docs/api/java/lang/Integer.html#shortValue())  value of 'Number' as a short. |
| [static String](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html) | [toHexString(num i)](https://docs.oracle.com/javase/7/docs/api/java/lang/Integer.html#toHexString(int))  String of num in base 16. |
| [String](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html) | [toString()](https://docs.oracle.com/javase/7/docs/api/java/lang/Integer.html#toString())  String representing number |
| [static String](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html) | [toString(num i)](https://docs.oracle.com/javase/7/docs/api/java/lang/Integer.html#toString(int))  String representing the number. |
| [static String](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html) | [toString(int i, int radix)](https://docs.oracle.com/javase/7/docs/api/java/lang/Integer.html#toString(int,%20int))  String of 'i' in radix |
| [static Number](https://docs.oracle.com/javase/7/docs/api/java/lang/Integer.html) | [valueOf(num i)](https://docs.oracle.com/javase/7/docs/api/java/lang/Integer.html#valueOf(int))  'Number' representing num |
| [static Number](https://docs.oracle.com/javase/7/docs/api/java/lang/Integer.html) | valueOf(String s)  'Number' of the String. |
| [static Integer](https://docs.oracle.com/javase/7/docs/api/java/lang/Integer.html) | valueOf(String s, int radix)  Integer from String when radix |
| boolean | [isNaN()](https://docs.oracle.com/javase/7/docs/api/java/lang/Double.html#isNaN())  true if Not-a-Number (NaN) |
| static boolean | [isNaN(double v)](https://docs.oracle.com/javase/7/docs/api/java/lang/Double.html#isNaN(double))  true if Not-a-Number (NaN) |
| static int | [MAX\_EXPONENT](https://docs.oracle.com/javase/7/docs/api/java/lang/Double.html#MAX_EXPONENT)  Max exponent of a double/float |
| static double | [MAX\_VALUE](https://docs.oracle.com/javase/7/docs/api/java/lang/Double.html#MAX_VALUE)  largest positive value double/float |
| static double | [MIN\_VALUE](https://docs.oracle.com/javase/7/docs/api/java/lang/Double.html#MIN_VALUE)  smallest value >= 0.0 of dbl/float |
| static double | [NaN](https://docs.oracle.com/javase/7/docs/api/java/lang/Double.html#NaN)  Not-a-Number (NaN) |

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| Type | Math - Method and Description (all static) |
| num | [abs(num a)](https://docs.oracle.com/javase/8/docs/api/java/lang/Math.html#abs-double-)  absolute value of a int… |
| double | [acos(double a)](https://docs.oracle.com/javase/8/docs/api/java/lang/Math.html#acos-double-)  arc cosine of a value; 0.0 – pi. |
| double | [asin(double a)](https://docs.oracle.com/javase/8/docs/api/java/lang/Math.html#asin-double-)  arc sine of a value; -pi/2 – pi/2. |
| double | [atan(double a)](https://docs.oracle.com/javase/8/docs/api/java/lang/Math.html#atan-double-)  arc tangent of a value; -pi/2 –pi/2. |
| double | [atan2(double y, double x)](https://docs.oracle.com/javase/8/docs/api/java/lang/Math.html#atan2-double-double-)  conversion of rect (x, y) to polar (r, theta) |
| double | [cbrt(double a)](https://docs.oracle.com/javase/8/docs/api/java/lang/Math.html#cbrt-double-)  cube root of a double value |
| double | [ceil(double arg)](https://docs.oracle.com/javase/8/docs/api/java/lang/Math.html#ceil-double-)  smallest integer double >= arg |
| double | [cos(double a)](https://docs.oracle.com/javase/8/docs/api/java/lang/Math.html#cos-double-), [sin(double a)](https://docs.oracle.com/javase/8/docs/api/java/lang/Math.html#sin-double-), [tan(double a)](https://docs.oracle.com/javase/8/docs/api/java/lang/Math.html#tan-double-)  trig cosine, sine, tangent of an angle |
| double | [cosh(double x)](https://docs.oracle.com/javase/8/docs/api/java/lang/Math.html#cosh-double-), [sinh(double x)](https://docs.oracle.com/javase/8/docs/api/java/lang/Math.html#sinh-double-), [tanh(double x)](https://docs.oracle.com/javase/8/docs/api/java/lang/Math.html#tanh-double-)  hyperbolic cosine, sin, tangent of an angle |
| double | [exp(double a)](https://docs.oracle.com/javase/8/docs/api/java/lang/Math.html#exp-double-)  e raised to the power a |
| double | [floor(double arg)](https://docs.oracle.com/javase/8/docs/api/java/lang/Math.html#floor-double-)  largest integer double <= arg |
| double | [hypot(double x, double y)](https://docs.oracle.com/javase/8/docs/api/java/lang/Math.html#hypot-double-double-)  sqrt(x2 +y2) |
| double | [log(double a)](https://docs.oracle.com/javase/8/docs/api/java/lang/Math.html#log-double-)  natural log (base e) |
| double | [log10(double a)](https://docs.oracle.com/javase/8/docs/api/java/lang/Math.html#log10-double-)  base 10 logarithm |
| double | min/[max(double a, double b)](https://docs.oracle.com/javase/8/docs/api/java/lang/Math.html#max-double-double-) int/float… min  smaller/greater of two values |
| double | [pow(double a, double b)](https://docs.oracle.com/javase/8/docs/api/java/lang/Math.html#pow-double-double-)  1st arg raised to the power of 2nd |
| double | [random()](https://docs.oracle.com/javase/8/docs/api/java/lang/Math.html#random--)  double value >= 0.0 and < 1.0 |
| long/int | [round(double/float arg)](https://docs.oracle.com/javase/8/docs/api/java/lang/Math.html#round-double-)  closest num to the arg (.5 🡪 even) |
| double | [sqrt(double a)](https://docs.oracle.com/javase/8/docs/api/java/lang/Math.html#sqrt-double-)  square root |
| double | [toDegrees(double angrad)](https://docs.oracle.com/javase/8/docs/api/java/lang/Math.html#toDegrees-double-)  Converts radians to degrees. |
| double | [toRadians(double angdeg)](https://docs.oracle.com/javase/8/docs/api/java/lang/Math.html#toRadians-double-)  Converts degrees to radians |
| double | [E](https://docs.oracle.com/javase/8/docs/api/java/lang/Math.html#E), base of the natural logarithms |
| double | [PI](https://docs.oracle.com/javase/8/docs/api/java/lang/Math.html#PI), ratio of circumference |

Where the description is in **red font**, the parameters are for an overloaded version of the method, usually taking different params (int v. long v. float). or additional params to start searching a String from an offset from the start or end of a string.