

Methods from the Math class (java.lang.Math):

<code>double random()</code>	returns a double value [0.0, 1.0)
<code>double pow(double a, double b)</code>	returns a raised to the power of b (a^b)
<code>double sqrt(double a)</code>	returns the square root of a (\sqrt{a}) for $a \geq 0$
<code>double floor(double a)</code>	a is rounded down to its nearest integer, returned as double
<code>double ceil(double a)</code>	a is rounded up to its nearest integer, returned as double
<code>long round(double a)</code>	a is rounded to the closest integer, returned as long

Methods from the Character class (java.lang.Character):

<code>boolean isDigit(char c)</code>	returns true if c is a digit
<code>boolean isLetter(char c)</code>	returns true if c is a letter
<code>boolean isLowerCase(char c)</code>	returns true if c is a lowercase letter
<code>boolean isUpperCase(char c)</code>	returns true if c is an uppercase letter
<code>char toLowerCase(char c)</code>	returns the lowercase version of c
<code>char toUpperCase(char c)</code>	returns the uppercase version of c

Methods from the String class (java.lang.String):

<code>int length()</code>	returns the number of characters in this string
<code>char charAt(int index)</code>	returns the character at the specified index in this string
<code>String toLowerCase()</code>	returns a new String with all letters in lowercase
<code>String toUpperCase()</code>	returns a new String with all letters in uppercase
<code>boolean equals(String s1)</code>	returns true if this string is equal to string s1
<code>int compareTo(String s1)</code>	returns an integer > 0 , $= 0$, or < 0 to indicate whether this string is greater than, equal to, or less than s1
<code>boolean contains(String s1)</code>	returns true if s1 is a substring of this string
<code>int indexOf(String s1)</code>	returns the index of the first occurrence of string s1 in this string. Returns -1 if not matched.
<code>int indexOf(String s1, int index)</code>	returns the index of the first occurrence of string s1 in this string after index. Returns -1 if not matched.
<code>String substring(int begin)</code>	returns this string's substring that begins with the character at the specified <code>begin</code> index and extends to the end of the string
<code>String substring(int begin, int end)</code>	returns this string's substring that begins at the specified <code>begin</code> index and extends to the character at <code>end - 1</code> .

Methods from the Arrays class (java.util.Arrays):

E [] indicates an array of elements are of type E.

<code>static sort(E[] array)</code>	Sorts the specified array in memory
<code>static String toString(E[] array)</code>	Returns a String representation of the specified array

Methods from the ArrayList class (java.util.ArrayList):

E indicates an object of type E.

<code>int size()</code>	Returns the number of elements in this list.
<code>add(E item)</code>	Appends the element <code>item</code> at the end of this list
<code>add(int index, E item)</code>	Adds the element <code>item</code> at the specified <code>index</code> in this list
<code>E get(int index)</code>	Returns the element at the specified <code>index</code> in this list
<code>E set(int index, E item)</code>	Replaces the element at the specified <code>index</code> in this list with the element <code>item</code> .
<code>boolean remove(E item)</code>	Removes the first occurrence of the element <code>item</code> from the list, if it is present.
<code>E remove(int index)</code>	Removes the element at the specified <code>index</code> in this list
<code>void clear()</code>	Removes all the elements from this list
<code>boolean contains(E item)</code>	Returns true if this list contains the element <code>item</code> , false otherwise