**String Methods**

capitalize() Converts the first character to upper case

count() Returns the number of times a specified value occurs in a string

endswith() Returns true if the string ends with the specified value

find() Searches the string for a specified value and returns the position if found (-1 if not)

format() Formats specified values in a string (“{}”.format(a))

isalnum() Returns True if all characters in the string are alphanumeric

isalpha() Returns True if all characters in the string are in the alphabet

isdecimal() Returns True if all characters in the string are decimals

islower() Returns True if all characters in the string are lower case

isnumeric() Returns True if all characters in the string are numeric

isprintable() Returns True if all characters in the string are printable (\n or \t returns false)

isspace() Returns True if all characters in the string are whitespaces

isupper() Returns True if all characters in the string are upper case

join() Joins the elements of the string (“#”.join(str) Joins them with #)

lower() Converts a string into lower case

maketrans() Returns a translation table to be used in translations

partition() Returns a tuple where the string is parted into three parts

replace() Returns string where a specified value is replaced with other value (str.replace(‘a’,’b’))

rfind(‘a’) Searches the string for a specified value and returns last position of where it was found

split() Splits the string at the specified separator, and returns a list

splitlines() Splits the string at line breaks and returns a list (\n or enter will be splitted)

startswith() Returns true if the string starts with the specified value

strip(‘a’) Returns a trimmed version of the string (removes beginning and tailing ‘a’s)

swapcase() Swaps cases, lower case becomes upper case and vice versa

title() Converts the first character of each word to upper case (after number or symbol)

translate() Returns a translated string

upper() Converts a string into upper case

**List/Array Methods**

append() Adds an element/list at the end of the list

clear() Removes all the elements from the list

copy() Returns a copy of the list

count() Returns the number of elements with the specified value

extend() Add the elements of a list to the end of the current list (str1.extend(str2)) no need of x=)

index() Returns the position of the first element in list

insert(3,’abc’) Adds an element at the specified position (insert abc at 3rd position)

pop(3) Removes the element at the specified position

remove(‘abc’) Removes the first item with the specified value (removes ‘abc’)

reverse() Reverses the order of the list (list.reverse())

sort() Sorts the list

**Dictionary Methods**

clear() Removes all the elements from the dictionary

copy() Returns a copy of the dictionary

fromkeys(x,y) Returns a dictionary with the specified keys and value (x = [x1,x2] res = { x1:y , x2:y } )

get(key) Returns the value of the specified key

items() Returns a list containing a tuple for each key value pair

keys() Returns a list containing the dictionary's keys

pop(key) Removes the element with the specified key

popitem() Removes the last item

update() Updates the dictionary with the specified key-value pairs (update({key:value}))

values() Returns a list of all the values in the dictionary

**Tuple Methods**

count() Returns the number of times a specified value occurs in a tuple

index() Searches the tuple for a specified value and returns the position of where it was found

**Set Methods**

add() Adds an element to the set

clear() Removes all the elements from the set

copy() Returns a copy of the set

difference() Returns a set containing the difference between two or more sets (returns 1st set)

discard(item) Remove the specified item

intersection() Returns a set, that is the intersection of two other sets

issubset() Returns whether another set contains this set or not

issuperset() Returns whether this set contains another set or not

pop() Removes an element from the set (last item)

remove() Removes the specified element (specified item)

symmetric\_difference() Returns a set with the symmetric differences of two sets

union() Return a set containing the union of sets

update() Update the set with the union of this set and others (x.update(y))

**Built in Functions**

abs() Returns the absolute value of a number

all() Returns True if all items in an iterable object are true

any() Returns True if any item in an iterable object is true

ascii() Returns a readable version of an object. Replaces none-ascii characters with escape character

bin() Returns the binary version of a number

bool() Returns the boolean value of the specified object

bytearray() Returns an array of bytes

bytes() Returns a bytes object

callable() Returns True if the specified object is callable, otherwise False

chr() Returns a character from the specified Unicode code.

classmethod() Converts a method into a class method

compile() Returns the specified source as an object, ready to be executed

complex() Returns a complex number

delattr() Deletes the specified attribute (property or method) from the specified object

dict() Returns a dictionary (Array)

dir() Returns a list of the specified object's properties and methods

divmod() Returns the quotient and the remainder when argument1 is divided by argument2

enumerate() Takes a collection (e.g. a tuple) and returns it as an enumerate object

eval() Evaluates and executes an expression

exec() Executes the specified code (or object)

filter() Use a filter function to exclude items in an iterable object

float() Returns a floating point number

format() Formats a specified value

frozenset() Returns a frozenset object

getattr() Returns the value of the specified attribute (property or method)

globals() Returns the current global symbol table as a dictionary

hasattr() Returns True if the specified object has the specified attribute (property/method)

hash() Returns the hash value of a specified object

help() Executes the built-in help system

hex() Converts a number into a hexadecimal value

id() Returns the id of an object

input() Allowing user input

int() Returns an integer number

isinstance() Returns True if a specified object is an instance of a specified object

issubclass() Returns True if a specified class is a subclass of a specified object

iter() Returns an iterator object

len() Returns the length of an object

list() Returns a list

locals() Returns an updated dictionary of the current local symbol table

map() Returns the specified iterator with the specified function applied to each item

max() Returns the largest item in an iterable

memoryview() Returns a memory view object

min() Returns the smallest item in an iterable

next() Returns the next item in an iterable

object() Returns a new object

oct() Converts a number into an octal

open() Opens a file and returns a file object

ord() Convert an integer representing the Unicode of the specified character

pow() Returns the value of x to the power of y

print() Prints to the standard output device

property() Gets, sets, deletes a property

range() Returns a sequence of numbers, starting from 0 and increments by 1 (by default)

repr() Returns a readable version of an object

reversed() Returns a reversed iterator

round() Rounds a numbers

set() Returns a new set object

setattr() Sets an attribute (property/method) of an object

slice() Returns a slice object

sorted() Returns a sorted list

@staticmethod() Converts a method into a static method

str() Returns a string object

sum() Sums the items of an iterator

super() Returns an object that represents the parent class

tuple() Returns a tuple

type() Returns the type of an object

vars() Returns the \_\_dict\_\_ property of an object

zip() Returns an iterator, from two or more iterators

**Math Methods**

math.acos() Returns the arc cosine of a number

math.acosh() Returns the inverse hyperbolic cosine of a number

math.asin() Returns the arc sine of a number

math.asinh() Returns the inverse hyperbolic sine of a number

math.atan() Returns the arc tangent of a number in radians

math.atan2() Returns the arc tangent of y/x in radians

math.atanh() Returns the inverse hyperbolic tangent of a number

math.ceil() Rounds a number up to the nearest integer

math.comb() Returns the number of ways to choose k items from n items without repetition and order

math.copysign() Returns a float consisting of the value of the first parameter and the sign of the second parameter

math.cos() Returns the cosine of a number

math.cosh() Returns the hyperbolic cosine of a number

math.degrees() Converts an angle from radians to degrees

math.dist() Returns the Euclidean distance between two points (p and q), where p and q are the coordinates of that point

math.erf() Returns the error function of a number

math.erfc() Returns the complementary error function of a number

math.exp() Returns E raised to the power of x

math.expm1() Returns Ex - 1

math.fabs() Returns the absolute value of a number

math.factorial() Returns the factorial of a number

math.floor() Rounds a number down to the nearest integer

math.fmod() Returns the remainder of x/y

math.frexp() Returns the mantissa and the exponent, of a specified number

math.fsum() Returns the sum of all items in any iterable (tuples, arrays, lists, etc.)

math.gamma() Returns the gamma function at x

math.gcd() Returns the greatest common divisor of two integers

math.hypot() Returns the Euclidean norm

math.isclose() Checks whether two values are close to each other, or not

math.isfinite() Checks whether a number is finite or not

math.isinf() Checks whether a number is infinite or not

math.isnan() Checks whether a value is NaN (not a number) or not

math.isqrt() Rounds a square root number downwards to the nearest integer

math.ldexp() Returns the inverse of math.frexp() which is x \* (2\*\*i) of the given numbers x and i

math.lgamma() Returns the log gamma value of x

math.log() Returns the natural logarithm of a number, or the logarithm of number to base

math.log10() Returns the base-10 logarithm of x

math.log1p() Returns the natural logarithm of 1+x

math.log2() Returns the base-2 logarithm of x

math.perm() Returns the number of ways to choose k items from n items with order and without repetition

math.pow() Returns the value of x to the power of y

math.prod() Returns the product of all the elements in an iterable

math.radians() Converts a degree value into radians

math.remainder() Returns the closest value that can make numerator completely divisible by the denominator

math.sin() Returns the sine of a number

math.sinh() Returns the hyperbolic sine of a number

math.sqrt() Returns the square root of a number

math.tan() Returns the tangent of a number

math.tanh() Returns the hyperbolic tangent of a number

math.trunc() Returns the truncated integer parts of a number