

In pure JS	
Pure JS	Lodash
<pre>function assign(target, ...sources) {   if (target == null) {     throw new TypeError('Cannot convert u   }    let to = Object(target);    for (let source of sources) {     if (source != null) {       for (let key in source) {         if (Object.prototype.hasOwnProperty           to[key] = source[key];         }       }     }   }    return to; }</pre>	assign
Object.assign	assignIn
<pre>function bind(func, thisArg, ...partials) {   return function(...args) {     return func.call(thisArg, ...partials, ...arg   } }</pre>	bind
<pre>function camelCase(string) {   const words = string.match(/[A-Za-z0-9]-/   const camelCaseWords = words.map((w     if (index === 0) {       return word.toLowerCase();     }     return word.charAt(0).toUpperCase() +   });   return camelCaseWords.join(""); }</pre>	camelCase
const capitalize = str => `\${str.charAt(0).to	capitalize

### In pure JS

```
function chain(value) {
  const result = {value};

  const lodashMethods = {
    // Define each Lodash method as a function
    map: (callback) => {
      result.value = result.value.map(callback);
      return lodashMethods;
    },
    filter: (callback) => {
      result.value = result.value.filter(callback);
      return lodashMethods;
    },
    reduce: (callback, initialValue) => {
      result.value = result.value.reduce(callback, initialValue);
      return lodashMethods;
    },
    // Add more Lodash methods as needed...
  };

  // Return the Lodash method object, which can be chained
  return lodashMethods;
}
```

chain

```
function clone(value) {
  // Check if the value is an array
  if (Array.isArray(value)) {
    // Use the spread operator to create a shallow copy
    return [...value];
  }

  // Check if the value is an object
  if (typeof value === "object" && value !== null) {
    // Use Object.assign to create a shallow copy
    return Object.assign({}, value);
  }

  // For all other types of values, return the value
  return value;
}
```

clone

In pure JS	
<pre>function cloneDeep(value) {   // Check if the value is an array   if (Array.isArray(value)) {     // Use the map method to create a new array     return value.map(cloneDeep);   }    // Check if the value is an object   if (typeof value === "object" &amp;&amp; value !== null) {     // Create a new object to hold the clone     const clonedObject = {};      // Recursively clone each property of the object     for (const key in value) {       clonedObject[key] = cloneDeep(value[key]);     }      return clonedObject;   }    // For all other types of values, return the value }</pre>	cloneDeep
<pre>function cloneDeepWith(value, customizer) {   // Check if the customizer is a function   if (typeof customizer !== "function") {     customizer = undefined;   }    // Check if the value is an array   if (Array.isArray(value)) {     // Use the map method to create a new array     return value.map(element =&gt; {       return cloneDeepWith(element, customizer);     });   }    // Check if the value is an object   if (typeof value === "object" &amp;&amp; value !== null) {     // Create a new object to hold the clone     const clonedObject = {};      // Recursively clone each property of the object     for (const key in value) {       const clonedValue = cloneDeepWith(value[key], customizer);       clonedObject[key] = customizer ? customizer(clonedValue) : clonedValue;     }      return clonedObject;   }    // For all other types of values, return the value }</pre>	cloneDeepWith
Array.prototype.filter(Boolean)	compact
const constant = x => () => x;	constant

In pure JS	
<pre>function countBy(collection, iteratee) {   // Create an empty object to hold the results   const result = {};    // If the iteratee is a function, use it to map the collection   if (typeof iteratee === "function") {     collection = collection.map(iteratee);   } else if (typeof iteratee === "string") {     // If the iteratee is a string, use it as a property key     collection = collection.map(element =&gt;       element[iteratee]     );   }    // Loop through the mapped collection and count by value   for (const element of collection) {     result[element] = (result[element]    0) + 1;   }    return result; }</pre>	countBy
<pre>function debounce(func, wait, options) {   let timeoutId;    return function debounced(...args) {     const context = this;      clearTimeout(timeoutId);      timeoutId = setTimeout(() =&gt; {       func.apply(context, args);     }, wait);   }; }</pre>	debounce
<pre>const defaults = (...args) =&gt; args.reverse().reduce((target, source) =&gt; {   for (const key in source) {     if (Object.prototype.hasOwnProperty.call(source, key)) {       target[key] = source[key];     }   } }, {})</pre>	defaults
<pre>function defaultsDeep(target, ...sources) {   for (const source of sources) {     if (typeof source === "object" &amp;&amp; source !== null) {       for (const key in source) {         if (Object.prototype.hasOwnProperty.call(source, key)) {           if (typeof target[key] === "object" &amp;&amp; target[key] !== null) {             defaultsDeep(target[key], source[key]);           } else if (!(key in target)) {             target[key] = source[key];           }         }       }     }   } }  return target; }</pre>	defaultsDeep
<pre>function delay(func, wait, ...args) {   setTimeout(() =&gt; {     func(...args);   }, wait); }</pre>	delay
Use Array.prototype.filter and Array.prototype.map to implement filter and map.	difference

In pure JS	
<pre>function drop(array, n = 1) {   if (!Array.isArray(array)    array.length ===     return []; }  return array.slice(n); }</pre>	drop
<pre>function dropRight(array, n = 1) {   if (!Array.isArray(array)    array.length ===     return []; }  return array.slice(0, -n); }</pre>	dropRight
Array.prototype.forEach	each
<pre>function escape(string) {   const regex = /[&amp;&lt;&gt;"\V]/g;   const escapeChars = {     '&amp;': '&amp;amp;',     '&lt;': '&amp;lt;',     '&gt;': '&amp;gt;',     '"': '&amp;quot;',     "'": '&amp;#x27;',     '/': '&amp;#x2F;';   };    return string.replace(regex, match =&gt; es }</pre>	escape
<pre>function escapeRegExp(string) {   const regex = /[\^\$.*+?()[]{}]/g;   return string.replace(regex, '\\\$&amp;'); }</pre>	escapeRegExp
Array.prototype.every	every
<pre>function extend(target, ...sources) {   for (const source of sources) {     for (const key in source) {       if (Object.prototype.hasOwnProperty.c         target[key] = source[key];       }     }   }   return target; }</pre>	extend
<pre>function fill(array, value, start = 0, end = a for (let i = start; i &lt; end; i++) {   array[i] = value; } return array; }</pre>	fill
Array.prototype.filter	filter
Array.prototype.find	find

In pure JS	
<pre>function findIndex(array, predicate, fromIndex) {   for (let i = fromIndex; i &lt; array.length; i++) {     if (predicate(array[i], i, array)) {       return i;     }   }   return -1; }</pre>	findIndex
<pre>function findKey(object, predicate) {   for (let key in object) {     if (object.hasOwnProperty(key) &amp;&amp; predicate(object[key], key, object)) {       return key;     }   }   return undefined; }</pre>	findKey
<pre>function findLast(collection, predicate, fromIndex) {   for (let i = fromIndex; i &gt;= 0; i--) {     if (predicate(collection[i], i, collection)) {       return collection[i];     }   }   return undefined; }</pre>	findLast
<pre>function findLastIndex(array, predicate, fromIndex) {   for (let i = fromIndex; i &gt;= 0; i--) {     if (predicate(array[i], i, array)) {       return i;     }   }   return -1; }</pre>	findLastIndex
array[0]	first
Array.prototype.flat	flatten
<pre>function flattenDeep(array) {   return array.reduce((acc, val) =&gt; Array.isArray(val) ? acc.concat(flattenDeep(val)) : [...acc, val], []); }</pre>	flattenDeep
<pre>function flow(...funcs) {   return function(...args) {     let result = funcs[0](...args);     for (let i = 1; i &lt; funcs.length; i++) {       result = funcs[i](result);     }     return result;   } }</pre>	flow

In pure JS	
<pre>function forEach(collection, iteratee) {   if (Array.isArray(collection)) {     for (let i = 0; i &lt; collection.length; i++) {       iteratee(collection[i], i, collection);     }   } else {     for (let key in collection) {       if (Object.prototype.hasOwnProperty.call(collection, key)) {         iteratee(collection[key], key, collection);       }     }   }   return collection; }</pre>	forEach
<pre>function forEachRight(collection, iteratee) {   if (Array.isArray(collection)) {     for (let i = collection.length - 1; i &gt;= 0; i--) {       iteratee(collection[i], i, collection);     }   } else {     const keys = Object.keys(collection);     for (let i = keys.length - 1; i &gt;= 0; i--) {       const key = keys[i];       if (Object.prototype.hasOwnProperty.call(collection, key)) {         iteratee(collection[key], key, collection);       }     }   }   return collection; }</pre>	forEachRight
<pre>function forOwn(object, iteratee) {   for (const key in object) {     if (object.hasOwnProperty(key)) {       iteratee(object[key], key, object);     }   }   return object; }</pre>	forOwn
<pre>function fromPairs(pairs) {   const result = {};   for (let i = 0; i &lt; pairs.length; i++) {     result[pairs[i][0]] = pairs[i][1];   }   return result; }</pre>	fromPairs
<pre>function get(object, path, defaultValue) {   const keys = Array.isArray(path) ? path : [path];   let result = object;   for (let i = 0; i &lt; keys.length; i++) {     const key = keys[i];     result = result[key];     if (result === undefined) {       return defaultValue;     }   }   return result; }</pre>	get

In pure JS	
same as get	get as getField
<pre>function groupBy(collection, iteratee) {   const groups = {};   for (let i = 0; i &lt; collection.length; i++) {     const key = iteratee(collection[i]);     if (groups[key] === undefined) {       groups[key] = [];     }     groups[key].push(collection[i]);   }   return groups; }</pre>	groupBy
<pre>function gt(value, other) {   return value &gt; other; }</pre>	gt
<pre>function gte(value, other) {   return value &gt;= other; }</pre>	gte
<pre>function has(object, path) {   return object != null &amp;&amp; Object.prototype</pre>	has
<pre>function hasIn(object, path) {   let currentObj = object;   for (const key of path.split('.')) {     if (currentObj != null &amp;&amp; key in currentObj) {       currentObj = currentObj[key];     } else {       return false;     }   }   return true; }</pre>	hasIn
<pre>function head(array) {   return (array != null &amp;&amp; array.length)     ? array[0]     : undefined; }</pre>	head
const identity = x => x;	identity
Array.prototype.includes or String.prototype.includes	
<pre>function indexOf(array, value) {   if (array == null) {     return -1;   }   const length = array.length;   for (let i = 0; i &lt; length; i++) {     if (array[i] === value) {       return i;     }   }   return -1; }</pre>	indexOf

In pure JS	
<pre>function intersection(...arrays) {   if (!arrays    !arrays.length) {     return [];   }   const result = [];   const firstArray = arrays[0];   const length = firstArray.length;   for (let i = 0; i &lt; length; i++) {     const value = firstArray[i];     if (result.includes(value)) {       continue;     }     if (arrays.every(array =&gt; array.includes(value))) {       result.push(value);     }   }   return result; }</pre>	intersection
Array.isArray	isArray
<pre>function isBoolean(value) {   return typeof value === 'boolean'; }</pre>	isBoolean
<pre>function isDate(value) {   return value instanceof Date &amp;&amp; !isNaN(value); }</pre>	isDate
<pre>function isEmpty(value) {   if (value == null) {     return true;   }   if (typeof value === 'string'    Array.isArray(value)) {     return !value.length;   }   if (typeof value === 'object') {     return !Object.keys(value).length;   }   return false; }</pre>	isEmpty

### In pure JS

```
function isEqual(value, other) {
  // Get the value type
  const type = Object.prototype.toString.call(value);

  // If the two values are not of the same type
  if (type !== Object.prototype.toString.call(other))
    return false;
}

// If the value is a primitive type, do a simple comparison
if ('[object Number]', '[object String]', '[object Boolean]' === type)
  return value === other;

// If the value is a function, check that they have the same string representation
if (type === '[object Function]')
  return value.toString() === other.toString();

// If the value is an object, perform a deep comparison
if (type === '[object Object]')
  const keys = Object.keys(value);

  if (keys.length !== Object.keys(other).length)
    return false;

  for (let i = 0; i < keys.length; i++) {
    const key = keys[i];

    if (!other.hasOwnProperty(key) || !isEqual(value[key], other[key]))
      return false;
  }

  return true;
}

// If the value is an array, perform a deep comparison
if (type === '[object Array]')
  if (value.length !== other.length)
    return false;

  for (let i = 0; i < value.length; i++) {
    if (!isEqual(value[i], other[i]))
      return false;
  }

  return true;
}

// If the value is a Date object, perform a comparison based on time
if (type === '[object Date]')
  return value.getTime() === other.getTime();

return false;
}
```

isEqual

In pure JS	
function isFunction(value) { return typeof value === 'function'; }	isFunction
function isNaN(value) { return Number.isNaN(value); }	isNaN
function isNull(value) { return value === null; }	isNull
function isNumber(value) { return typeof value === 'number' && isFinite(value); }	isNumber
function isObject(value) { const type = typeof value; return value !== null && (type === 'object'    value instanceof Object); }	isObject
same as isObject	isObject as isObjectLodash
function isPlainObject(value) { if (typeof value !== 'object'    value === null) return false; const proto = Object.getPrototypeOf(value); if (proto === null) { return true; }  let baseProto = proto; while (Object.getPrototypeOf(baseProto) !== baseProto) baseProto = Object.getPrototypeOf(baseProto);  return proto === baseProto; }	isPlainObject
function isString(value) { return typeof value === 'string'    value instanceof String; }	isString
function isUndefined(value) { return typeof value === 'undefined'; }	isUndefined

In pure JS	
<pre>function iteratee(value) {   if (typeof value == 'function') {     return value;   }   if (Array.isArray(value)) {     return function (obj) {       return obj[value[0]] === value[1];     };   }   if (typeof value == 'object') {     return function (obj) {       for (var key in value) {         if (obj[key] !== value[key]) {           return false;         }       }       return true;     };   }   return function (obj) {     return obj[value];   }; }</pre>	iteratee
<pre>function keyBy(array, keyFunction) {   return array.reduce((result, element) =&gt;     const key = keyFunction(element);     result[key] = element;     return result;   ), {}; }</pre>	keyBy
Object.keys	keys
arr[-1]	last
<pre>function Lt(value, other) {   return value &lt; other; }</pre>	Lt
<pre>function Lte(value, other) {   return value &lt;= other; }</pre>	Lte
Array.prototype.map	map
<pre>function mapKeys(obj, fn) {   return Object.fromEntries(     Object.entries(obj).map(([key, val]) =&gt; [       );     } }</pre>	mapKeys
<pre>function mapValues(obj, iteratee) {   const result = {};   for (const [key, value] of Object.entries(obj)) {     result[key] = iteratee(value, key, obj);   }   return result; }</pre>	mapValues

In pure JS	
<pre>function max(array) {   if (!Array.isArray(array)    array.length ===     return undefined; }  let maxValue = array[0];  for (let i = 1; i &lt; array.length; i++) {   if (array[i] &gt; maxValue) {     maxValue = array[i];   } }  return maxValue; }</pre>	max
<pre>function memoize(fn) {   const cache = {};   return function(...args) {     const key = JSON.stringify(args);     if (cache.hasOwnProperty(key)) {       return cache[key];     } else {       const result = fn.apply(this, args);       cache[key] = result;       return result;     }   }; }</pre>	memoize
<pre>function merge() {   const result = {};   for (let i = 0; i &lt; arguments.length; i++) {     const obj = arguments[i];     if (!obj) continue;     for (let key in obj) {       if (obj.hasOwnProperty(key)) {         if (Object.prototype.toString.call(obj[key]) === '[object Object]')           result[key] = merge(result[key], obj[key]);         else {           result[key] = obj[key];         }       }     }   }   return result; }</pre>	merge

In pure JS	
<pre>function mergeWith(...objects) {   // Define the customizer function   function customizer(objValue, srcValue)     // If the value is an array, concatenate them     if (Array.isArray(objValue) &amp;&amp; Array.isArray(srcValue))       return objValue.concat(srcValue);   }   // If the value is an object, call the merger   if (typeof objValue === "object" &amp;&amp; typeof srcValue === "object")     return mergeWith(objValue, srcValue);   }   // If none of the above, use the default implementation   return undefined; } // Use the spread operator and Object.assign to merge objects return Object.assign({}, ...objects, customizer); }</pre>	mergeWith
<pre>function min(collection) {   return Math.min(...collection); }</pre>	min
const noop = () => undefined;	noop
<pre>function omit(obj, props) {   return Object.keys(obj)     .filter((key) =&gt; !props.includes(key))     .reduce((acc, key) =&gt; {       acc[key] = obj[key];       return acc;     }, {}); }</pre>	omit
<pre>function omitBy(obj, predicate) {   return Object.entries(obj).reduce((acc, [key, value]) =&gt; {     if (!predicate(value)) {       acc[key] = value;     }     return acc;   }, {}); }</pre>	omitBy
<pre>function once(func) {   let result;   let hasBeenCalled = false;    return function() {     if (!hasBeenCalled) {       hasBeenCalled = true;       result = func.apply(this, arguments);     }     return result;   } }</pre>	once

In pure JS	
<pre>function orderBy(arr, props, orders) {   // If the properties or orders array is not provided, return the original array   props = props    [];   orders = orders    [];    // If props is not an array, convert it into an array   if (!Array.isArray(props)) {     props = [props];   }    // If orders is not an array, convert it into an array   if (!Array.isArray(orders)) {     orders = [orders];   }    // Return the sorted array   return arr.sort(function (a, b) {     for (var i = 0; i &lt; props.length; i++) {       var prop = props[i];       var order = orders[i]    'asc';       var aValue = a[prop];       var bValue = b[prop];        if (aValue &lt; bValue) {         return order === 'asc' ? -1 : 1;       } else if (aValue &gt; bValue) {         return order === 'asc' ? 1 : -1;       }     }      return 0;   }); }</pre>	orderBy
const padEnd = (str, len, pad = ' ') => str + pad.repeat(len - str.length).slice(0, len);	padEnd
const padStart = (str, len, pad = ' ') => pad.repeat(len - str.length).slice(0, Math.min(str.length, len));	padStart
parseInt	parseInt
<pre>function partial(fn, ...args) {   return function(...remainingArgs) {     return fn(...args, ...remainingArgs);   }; }</pre>	partial
<pre>function partition(arr, predicate) {   return arr.reduce(     (result, current) =&gt; {       result[predicate(current) ? 0 : 1].push(current);       return result;     },     [[], []]   ); }</pre>	partition

In pure JS	
<pre>function pick(obj, keys) {   return keys.reduce((acc, key) =&gt; {     if (obj[key] !== undefined) {       acc[key] = obj[key];     }     return acc;   }, {}); }</pre>	pick
<pre>function pickBy(obj, predicate) {   const newObj = {};   for (const key in obj) {     if (Object.prototype.hasOwnProperty.call(obj, key)) {       const value = obj[key];       if (predicate(value, key)) {         newObj[key] = value;       }     }   }   return newObj; }</pre>	pickBy
<pre>function pluck(collection, property) {   return collection.map(obj =&gt; obj[property]); }</pre>	pluck
_.prototype is a special property of the local prototype	
<pre>function pull(array, ...values) {   const length = array == null ? 0 : array.length;   const result = [];    for (let i = 0; i &lt; length; i++) {     const value = array[i];     if (!values.includes(value)) {       result.push(value);     }   }    array.length = 0;   for (let i = 0, resultLength = result.length;        i &lt; resultLength;        array[i] = result[i]); }  return array; }</pre>	pull
<pre>function random(min = 0, max = 1, floating = false) {   if (floating) {     return Math.random() * (max - min) + min;   }   return Math.floor(Math.random() * (max - min)) + min; }</pre>	random

In pure JS	
<pre>function range(start, end, step = 1) {   if (typeof end === 'undefined') {     end = start;     start = 0;   }   const result = [];   let i = start;   while ((step &gt; 0 &amp;&amp; i &lt; end)    (step &lt; 0 &amp;&amp; i &gt; end)) {     result.push(i);     i += step;   }   return result; }</pre>	range
Array.prototype.reduce	reduce
<pre>function reduceRight(array, iteratee, accumulator) {   let i = array.length - 1;   if (accumulator === undefined) {     accumulator = array[i];     i--;   }   for (; i &gt;= 0; i--) {     accumulator = iteratee(accumulator, array[i], i);   }   return accumulator; }</pre>	reduceRight
<pre>function reject(array, predicate) {   const result = [];   for (let i = 0; i &lt; array.length; i++) {     if (!predicate(array[i])) {       result.push(array[i]);     }   }   return result; }</pre>	reject
<pre>function remove(array, predicate) {   let index = -1;   const length = array == null ? 0 : array.length;   let resIndex = 0;   const result = [];    while (++index &lt; length) {     const value = array[index];     if (predicate(value, index, array)) {       result[resIndex++] = value;     }   }   index = -1;   while (++index &lt; length) {     const value = array[index];     if (!predicate(value, index, array)) {       array[resIndex++] = value;     }   }   array.length = resIndex;   return result; }</pre>	remove

In pure JS	
function repeat(str, n) { return Array(n+1).join(str); } function rest(array, n = 1) { if (!Array.isArray(array)) { throw new TypeError('Expected an array'); }  if (typeof n !== 'number') { throw new TypeError('Expected a number'); }  return array.slice(n); }	repeat rest
const round = (num, precision) => { const str = num.toString(); const decimal = str.indexOf('.'); const digits = decimal === -1 ? 0 : str.length - decimal - 1; const multiplier = Math.pow(10, precision); const rounded = Math.floor(num * multiplier) / multiplier; const roundedStr = rounded.toString(); const roundedDecimal = roundedStr.indexOf('.'); const roundedDigits = roundedDecimal === -1 ? 0 : roundedStr.length - roundedDecimal - 1; const difference = digits - roundedDigits; const zeros = difference > 0 ? '0'.repeat(difference) : ''; const finalStr = roundedStr + zeros; return finalStr;	round
function sample(array) { const length = array == null ? 0 : array.length; return length ? array[Math.floor(Math.random() * length)] : null; } function sampleSize(array, n) { const result = []; const length = array == null ? 0 : array.length;  if (!length    n < 1) { return result; }  let index = -1; let lastIndex = length - 1;  while (++index < n) { const rand = index + Math.floor(Math.random() * (lastIndex - index)); result[index] = array[rand]; array[rand] = array[index]; }  return result.slice(0, n); }	sample sampleSize

In pure JS	
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```
function set(object, path, value) {
  // convert path string to an array of path keys
  const keys = path.split('.');
  // get the last key of the path
  const lastKey = keys.pop();
  // iterate over keys to get the nested object
  let nestedObj = object;
  for (const key of keys) {
    if (!nestedObj[key]) {
      nestedObj[key] = {};
    }
    nestedObj = nestedObj[key];
  }
  // set the value at the last key of the path
  nestedObj[lastKey] = value;
  return object;
}

// example usage
const obj = { a: { b: { c: 1 } } };
set(obj, 'a.b.c', 2); // { a: { b: { c: 2 } } }
```

function shuffle(array) {   let currentIndex = array.length;   let temporaryValue, randomIndex;    while (0 !== currentIndex) {     randomIndex = Math.floor(Math.random() * currentIndex);     currentIndex -= 1;      temporaryValue = array[currentIndex];     array[currentIndex] = array[randomIndex];     array[randomIndex] = temporaryValue;   }    return array; }	shuffle
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function size(obj) {   return Object.keys(obj).length; }	size
--	------

function snakeCase(str) {   return str     .replace(/[A-Z]/g, (match, offset) => (offset - 1) === 0 ? match.toLowerCase() : `_\${match.toLowerCase()}`)     .replace(/\s\w/g, '_')     .replace(/\^a-zA-Z0-9\w/gi, ''); }	snakeCase
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Array.prototype.some	some
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In pure JS	
<pre>function sortBy(array, callback) {   return array.map((item, index) =&gt; ({     value: item,     index: index,     criteria: callback(item, index),   }))     .sort((a, b) =&gt; {       let criteriaA = a.criteria       let criteriaB = b.criteria        if (criteriaA !== criteriaB) {         if (criteriaA &gt; criteriaB    criteriaA ===           return 1         } else if (criteriaA &lt; criteriaB    criteria           return -1         }       }       return a.index - b.index     })     .map((item) =&gt; item.value) }</pre>	sortBy
<pre>function startCase(str) {   return str     .replace(/[^a-zA-Z]+/gi, " ")     .trim()     .split(" ")     .map(word =&gt; word[0].toUpperCase() +     .join(" "); }</pre>	startCase
<pre>function startsWith(str, substr) {   return str.slice(0, substr.length) === substr; }</pre>	startsWith
<pre>Array.prototype.reduce((acc, num) =&gt; { a sum</pre>	
<pre>function take(array, n=1) {   if (!Array.isArray(array)) {     return [];   }   return array.slice(0, n); }</pre>	take
<pre>function template(str) {   return function(data) {     let result = str;     for (let key in data) {       result = result.replace(new RegExp(`\\\$\${key}`), data[key]);     }     return result;   } }</pre>	template

In pure JS	
<pre>function throttle(func, wait) {   let timeout;   return function (...args) {     const context = this;     if (!timeout) {       func.apply(context, args);       timeout = setTimeout(() =&gt; {         timeout = null;       }, wait);     }   }; }</pre>	throttle
<pre>function times(n, iteratee) {   const result = Array(n);   for (let i = 0; i &lt; n; i++) {     result[i] = iteratee(i);   }   return result; }</pre>	times
<pre>function toArray(value) {   if (value == null) {     return [];   }   if (Array.isArray(value)) {     return value.slice();   }   if (typeof value === 'object') {     return Object.values(value);   }   return [value]; }</pre>	toArray
<pre>function toPath(path) {   if (Array.isArray(path)) {     return path;   }   if (typeof path === 'string') {     return path.split(/\[\.\]/).filter(Boolean);   }   return [path]; }</pre>	toPath
<pre>function transform(collection, iteratee, accumulator) {   // check if accumulator is undefined, if it is, set it to an empty array   if (accumulator === undefined) {     accumulator = [];   }    // iterate over the collection   for (let i = 0; i &lt; collection.length; i++) {     accumulator = iteratee(accumulator, collection[i], i);   }    return accumulator; }</pre>	transform
<pre>function trim(str) {   return str.replace(/^\s+ \s+\$/g, ''); }</pre>	trim

In pure JS	
<pre>function trimEnd(string, chars = ' ') {   if (string &amp;&amp; chars) {     const regex = new RegExp(`[\$\{chars\}]`);      return string.replace(regex, "").replace(/`/g, '');   }   return string.trim(); }</pre>	trimEnd
<pre>if (!String.prototype.trimStart) {   String.prototype.trimStart = String.prototype.trim;   return this.replace(/^\\s+/, ""); }</pre>	trimStart
<pre>function truncate(str, options) {   if (str.length &lt;= options.length) {     return str;   }   const separator = options.ellipsis    '...';   const charsToShow = options.length - separator.length;   const truncatedString = str.slice(0, charsToShow);   return truncatedString + separator; }</pre>	truncate
<pre>function union(...arrays) {   return [...new Set(arrays.flat())]; }</pre>	union
<pre>function uniq(arr) {   return Array.from(new Set(arr)); }</pre>	uniq
<pre>function uniqBy(array, iteratee) {   const seen = new Set();   return array.filter((element) =&gt; {     const key = iteratee(element);     if (seen.has(key)) {       return false;     } else {       seen.add(key);       return true;     }   }); }</pre>	uniqBy
<pre>let id = 0;  function uniqueId(prefix = "") {   id += 1;   return prefix + id; }</pre>	uniqueId
<pre>function unzip(arr) {   const maxLength = Math.max(...arr.map(a =&gt; a.length));   const result = new Array(maxLength);    for (let i = 0; i &lt; maxLength; i++) {     result[i] = arr.map(a =&gt; a[i]);   }    return result; }</pre>	unzip

In pure JS	
function upperFirst(str) { if (typeof str !== 'string'    str.length === 0) return ''; return str.charAt(0).toUpperCase() + str.substring(1); } Object.values	upperFirst values
function where(array, properties) { return array.filter(function(obj) { for (var key in properties) { if (obj[key] !== properties[key]) { return false; } } return true; }); } function without(array, ...values) { return array.filter(item => !values.includes(item)); }	where without
function words(str, pattern) { pattern = pattern    /\w+/g; return str.match(pattern); }	words
function wrap(func, wrapper) { return function(...args) { return wrapper(func, ...args); }; }	wrap
function zip(...arrays) { const maxLength = Math.max(...arrays.map(arr => arr.length)); const result = [];  for (let i = 0; i < maxLength; i++) { result.push(arrays.map(a => a[i])); }  return result; }	zip
function zipObject(props, values) { return props.reduce((obj, prop, index) => obj[prop] = values[index]; return obj; , {}); }	zipObject