Batteries

BatArray.avg : int array -> float

BatArray.backwards : 'a array -> 'a BatEnum.t

 $BatArray.bsearch: 'a\ BatOrd.ord -> 'a\ array -> 'a -> [\ `All\_bigger\ |\ `All\_lower\ |\ `At\ of\ int\ |\ `Empty\ |\ `Just\_after\ of\ int\ ]$ 

BatArray.cartesian\_product : 'a array -> 'b array -> ('a \* 'b) array

BatArray.compare: 'a BatOrd.comp -> 'a array BatOrd.comp

BatArray.count\_matching: ('a -> bool) -> 'a array -> int

BatArray.decorate\_fast\_sort : ('a -> 'b) -> 'a array -> 'a array

BatArray.decorate\_stable\_sort : ('a -> 'b) -> 'a array -> 'a array

BatArray.enum : 'a array -> 'a BatEnum.t

BatArray.equal: 'a BatOrd.eq -> 'a array BatOrd.eq

BatArray.favg : float array -> float

BatArray.filter: ('a -> bool) -> 'a array -> 'a array

BatArray.filter\_map: ('a -> 'b option) -> 'a array -> 'b array

BatArray.filteri: (int -> 'a -> bool) -> 'a array -> 'a array

BatArray.find: ('a -> bool) -> 'a array -> 'a

BatArray.find\_all: ('a -> bool) -> 'a array -> 'a array

BatArray.findi : ('a -> bool) -> 'a array -> int

BatArray.fold: ('a -> 'b -> 'a) -> 'a -> 'b array -> 'a

BatArray.fold\_lefti: ('a -> int -> 'b -> 'a) -> 'a -> 'b array -> 'a

BatArray.fold\_righti: (int -> 'b -> 'a -> 'a) -> 'b array -> 'a -> 'a

BatArray.fold\_while: ('acc -> 'a -> bool) -> ('acc -> 'a -> 'acc) -> 'acc -> 'a array -> 'acc \* int

BatArray.fsum : float array -> float

BatArray.head: 'a array -> int -> 'a array

BatArray.insert: 'a array -> 'a -> int -> 'a array

BatArray.is\_sorted\_by: ('a -> 'b) -> 'a array -> bool

BatArray.iter2i: (int -> 'a -> 'b -> unit) -> 'a array -> 'b array -> unit

BatArray.kahan\_sum : float array -> float

BatArray.Labels.count\_matching: f:('a -> bool) -> 'a t -> int

BatArray.Labels.create: int -> init:'a -> 'a array

BatArray.Labels.filter: f:('a -> bool) -> 'a t -> 'a t

BatArray.Labels.filter\_map: f:('a -> 'b option) -> 'a t -> 'b t

BatArray.Labels.find: f:('a -> bool) -> 'a t -> 'a

BatArray.Labels.findi: f:('a -> bool) -> 'a t -> int

BatArray.Labels.fold: f:('a -> 'b -> 'a) -> init:'a -> 'b array -> 'a

**Batteries** BatArray.Labels.fold\_while: p:('acc -> 'a -> bool) -> f:('acc -> 'a -> 'acc) -> init:'acc -> 'a array -> 'acc \* int BatArray.Labels.iter2i : f:(int -> 'a -> 'b -> unit) -> 'a t -> 'b t -> unit BatArray.Labels.modifyi: f:(int -> 'a -> 'a) -> 'a array -> unit BatArray.left: 'a array -> int -> 'a array BatArray.max: 'a array -> 'a BatArray.min: 'a array -> 'a BatArray.min\_max: 'a array -> 'a \* 'a BatArray.modify: ('a -> 'a) -> 'a array -> unit BatArray.modifyi: (int -> 'a -> 'a) -> 'a array -> unit BatArray.of\_backwards: 'a BatEnum.t -> 'a array BatArray.of\_enum : 'a BatEnum.t -> 'a array BatArray.ord: 'a BatOrd.ord -> 'a array BatOrd.ord BatArray.partition: ('a -> bool) -> 'a array -> 'a array \* 'a array BatArray.pivot\_split: 'a BatOrd.ord -> 'a array -> 'a -> int \* int BatArray.print: ?first:string -> ?last:string -> ?sep:string -> ('a, 'b) BatIO.printer -> ('a t, 'b) BatIO.printer BatArray.range: 'a array -> int BatEnum.t BatArray.reduce : ('a -> 'a -> 'a) -> 'a array -> 'a BatArray.remove\_at : int -> 'a array -> 'a array BatArray.rev : 'a array -> 'a array BatArray.rev\_in\_place : 'a array -> unit BatArray.right: 'a array -> int -> 'a array BatArray.shuffle: ?state:Random.State.t -> 'a array -> unit BatArray.singleton: 'a -> 'a array BatArray.sum: int array -> int BatArray.tail: 'a array -> int -> 'a array BatList.(@): 'a list -> 'a list -> 'a list BatList.assoc\_inv: 'b -> ('a \* 'b) list -> 'a BatList.assq\_inv: 'b -> ('a \* 'b) list -> 'a BatList.at: 'a list -> int -> 'a BatList.at\_opt: 'a list -> int -> 'a option BatList.backwards: 'a list -> 'a BatEnum.t BatList.cartesian\_product : 'a list -> 'b list -> ('a \* 'b) list

BatList.count\_matching: ('a -> bool) -> 'a list -> int

BatList.drop: int -> 'a list -> 'a list

**Batteries** 

BatList.drop\_while: ('a -> bool) -> 'a list -> 'a list

BatList.dropwhile: ('a -> bool) -> 'a list -> 'a list

BatList.enum : 'a list -> 'a BatEnum.t

BatList.eq: 'a BatOrd.eq -> 'a list BatOrd.eq

BatList.favg: float list -> float

BatList.filteri\_map: (int -> 'a -> 'b option) -> 'a list -> 'b list

BatList.find\_exn: ('a -> bool) -> exn -> 'a list -> 'a

BatList.find\_map\_opt : ('a -> 'b option) -> 'a list -> 'b option

BatList.findi: (int -> 'a -> bool) -> 'a list -> int \* 'a

BatList.first: 'a list -> 'a

BatList.fold: ('a -> 'b -> 'a) -> 'a -> 'b list -> 'a

BatList.fold\_lefti: ('a -> int -> 'b -> 'a) -> 'a -> 'b list -> 'a

BatList.fold\_righti : (int -> 'b -> 'a -> 'a) -> 'b list -> 'a -> 'a

BatList.fold\_while: ('acc -> 'a -> bool) -> ('acc -> 'a -> 'acc) -> 'acc -> 'a list -> 'acc \* 'a list

BatList.frange: float -> [< `Downto | `To ] -> float -> int -> float list

BatList.fsum : float list -> float

BatList.group: ('a -> 'a -> int) -> 'a list -> 'a list list

BatList.group\_consecutive : ('a -> 'a -> bool) -> 'a list -> 'a list list

BatList.index\_of: 'a -> 'a list -> int option

BatList.index\_ofg: 'a -> 'a list -> int option

BatList.interleave: ?first:'a -> ?last:'a -> 'a list -> 'a list

BatList.is\_empty: 'a list -> bool

BatList.iter2i: (int -> 'a -> 'b -> unit) -> 'a list -> 'b list -> unit

BatList.kahan\_sum : float list -> float

BatList.Labels.count\_matching: f:('a -> bool) -> 'a list -> int

BatList.Labels.drop\_while: f:('a -> bool) -> 'a list -> 'a list

BatList.Labels.find\_exn: f:('a -> bool) -> exn -> 'a list -> 'a

BatList.Labels.find\_map\_opt: f:('a -> 'b option) -> 'a list -> 'b option

BatList.Labels.findi: f:(int -> 'a -> bool) -> 'a list -> int \* 'a

BatList.Labels.fold : f:('a -> 'b -> 'a) -> init:'a -> 'b list -> 'a

BatList.Labels.remove\_if: f:('a -> bool) -> 'a list -> 'a list

BatList.Labels.rfind: f:('a -> bool) -> 'a list -> 'a

BatList.Labels.subset: cmp:('a -> 'b -> int) -> 'a list -> 'b list -> bool

BatList.Labels.take\_while: f:('a -> bool) -> 'a list -> 'a list

Batteries BatList.last: 'a list -> 'a BatList.make: int -> 'a -> 'a list BatList.map2i: (int -> 'a -> 'b -> 'c) -> 'a list -> 'b list -> 'c list BatList.max: ?cmp:('a -> 'a -> int) -> 'a list -> 'a BatList.mem\_cmp: ('a -> 'a -> int) -> 'a -> 'a list -> bool BatList.min: ?cmp:('a -> 'a -> int) -> 'a list -> 'a BatList.min\_max : ?cmp:('a -> 'a -> int) -> 'a list -> 'a \* 'a BatList.modify: 'a -> ('b -> 'b) -> ('a \* 'b) list -> ('a \* 'b) list BatList.modify\_at: int -> ('a -> 'a) -> 'a list -> 'a list BatList.modify\_def: 'b -> 'a -> ('b -> 'b) -> ('a \* 'b) list -> ('a \* 'b) list BatList.modify\_opt: 'a -> ('b option -> 'b option) -> ('a \* 'b) list -> ('a \* 'b) list BatList.modify\_opt\_at: int -> ('a -> 'a option) -> 'a list -> 'a list BatList.n\_cartesian\_product : 'a list list -> 'a list list BatList.nsplit: ('a -> bool) -> 'a list -> 'a list list BatList.ntake: int -> 'a list -> 'a list list BatList.of backwards: 'a BatEnum.t -> 'a list BatList.of enum: 'a BatEnum.t -> 'a list BatList.ord: 'a BatOrd.ord -> 'a list BatOrd.ord BatList.print: ?first:string -> ?last:string -> ?sep:string -> ('a BatInnerIO.output -> 'b -> unit) -> 'a BatInnerIO.output -> 'b list -> unit BatList.range: int -> [< `Downto | `To ] -> int -> int list BatList.reduce : ('a -> 'a -> 'a) -> 'a list -> 'a BatList remove: 'a list -> 'a -> 'a list BatList.remove\_all: 'a list -> 'a -> 'a list BatList.remove\_at : int -> 'a list -> 'a list BatList.remove\_if: ('a -> bool) -> 'a list -> 'a list BatList.rfind: ('a -> bool) -> 'a list -> 'a BatList.rindex\_of: 'a -> 'a list -> int option BatList.rindex\_ofg: 'a -> 'a list -> int option BatList.shuffle: ?state:Random.State.t -> 'a list -> 'a list BatList.singleton: 'a -> 'a list BatList.sort\_unique: ('a -> 'a -> int) -> 'a list -> 'a list BatList.span: ('a -> bool) -> 'a list -> 'a list \* 'a list

BatList.split\_at: int -> 'a list -> 'a list \* 'a list

BatList.split\_nth: int -> 'a list -> 'a list \* 'a list

**Batteries** BatList.subset: ('a -> 'b -> int) -> 'a list -> 'b list -> bool BatList.sum: int list -> int BatList.take: int -> 'a list -> 'a list BatList.take while: ('a -> bool) -> 'a list -> 'a list BatList.takedrop: int -> 'a list -> 'a list \* 'a list BatList.takewhile: ('a -> bool) -> 'a list -> 'a list BatList.transpose: 'a list list -> 'a list list BatList.unfold : 'b -> ('b -> ('a \* 'b) option) -> 'a list BatList.unfold\_exc: (unit -> 'a) -> 'a list \* exn BatList.unfold\_exn: (unit -> 'a) -> 'a list \* exn BatList.unique: ?eq:('a -> 'a -> bool) -> 'a list -> 'a list BatList.unique\_cmp:?cmp:('a -> 'a -> int) -> 'a list -> 'a list BatList.unique\_hash : ?hash:('a -> int) -> ?eq:('a -> 'a -> bool) -> 'a list -> 'a list BatMap.( --> ): ('a, 'b) t -> 'a -> 'b BatMap.( <-- ): ('a, 'b) t -> 'a \* 'b -> ('a, 'b) t BatMap.add\_carry: 'a -> 'b -> ('a, 'b) t -> ('a, 'b) t \* 'b option BatMap.any: ('key, 'a) t -> 'key \* 'a BatMap.at\_rank\_exn: int -> ('key, 'a) t -> 'key \* 'a BatMap.backwards: ('a, 'b) t -> ('a \* 'b) BatEnum.t BatMap.diff: ('a, 'b) t -> ('a, 'b) t -> ('a, 'b) t BatMap.enum: ('a, 'b) t -> ('a \* 'b) BatEnum.t BatMap.Exceptionless.any: ('a, 'b) t -> ('a \* 'b) option BatMap.Exceptionless.choose: ('a, 'b) t -> ('a \* 'b) option BatMap.Exceptionless.find: 'a -> ('a, 'b) t -> 'b option BatMap.extract : 'a -> ('a, 'b) t -> 'b \* ('a, 'b) t BatMap.filterv: ('a -> bool) -> ('key, 'a) t -> ('key, 'a) t BatMap.find\_default: 'b -> 'a -> ('a, 'b) t -> 'b BatMap.foldi : ('a -> 'b -> 'c -> 'c) -> ('a, 'b) t -> 'c -> 'c BatMap.intersect: ('b -> 'c -> 'd) -> ('a, 'b) t -> ('a, 'c) t -> ('a, 'd) t BatMap.keys: ('a, 'b) t -> 'a BatEnum.t BatMap.modify: 'a -> ('b -> 'b) -> ('a, 'b) t -> ('a, 'b) t BatMap.modify\_def: 'b -> 'a -> ('b -> 'b) -> ('a, 'b) t -> ('a, 'b) t BatMap.modify\_opt : 'a -> ('b option -> 'b option) -> ('a, 'b) t -> ('a, 'b) t

BatMap.of\_enum: ('a \* 'b) BatEnum.t -> ('a, 'b) t

Batteries

BatMap.pop: ('a, 'b) t -> ('a \* 'b) \* ('a, 'b) t

BatMap.pop\_max\_binding: ('key, 'a) t -> ('key \* 'a) \* ('key, 'a) t

BatMap.pop\_min\_binding : ('key, 'a)  $t \rightarrow$  ('key \* 'a) \* ('key, 'a) t

BatMap.print: ?first:string -> ?last:string -> ?last:string -> ?sep:string -> ?kvsep:string -> ('a BatInnerIO.output -> 'b -> unit) -> ('a BatInnerIO.output -> 'c -> unit) -> 'a BatInnerIO.output -> ('b, 'c) t -> unit) -> 'a BatInnerIO.output -> 'c ->

BatMap.remove\_exn: 'a -> ('a, 'b) t -> ('a, 'b) t

BatMap.union\_stdlib: ('key -> 'a -> 'a option) -> ('key, 'a) t -> ('key, 'a) t -> ('key, 'a) t

BatMap.update\_stdlib: 'a -> ('b option -> 'b option) -> ('a, 'b) t -> ('a, 'b) t

BatMap.values : ('a, 'b) t -> 'b BatEnum.t

BatOption.(|?): 'a option -> 'a -> 'a

BatOption.apply: ('a -> 'a) option -> 'a -> 'a

BatOption.default: 'a -> 'a option -> 'a

BatOption.default\_delayed : (unit -> 'a) -> 'a option -> 'a

BatOption.enum : 'a option -> 'a BatEnum.t

BatOption.eq: ?eq:('a -> 'a -> bool) -> 'a option -> 'a option -> bool

BatOption.filter: ('a -> bool) -> 'a option -> 'a option

BatOption.get\_exn: 'a option -> exn -> 'a

BatOption.Infix.( >>= ): 'a option -> ('a -> 'b option) -> 'b option

BatOption.Labels.map: f:('a -> 'b) -> 'a option -> 'b option

BatOption.Labels.map\_default: f:('a -> 'b) -> 'b -> 'a option -> 'b

BatOption.Labels.may: f:('a -> unit) -> 'a option -> unit

BatOption.map\_default: ('a -> 'b) -> 'b -> 'a option -> 'b

BatOption.map\_default\_delayed: ('a -> 'b) -> (unit -> 'b) -> 'a option -> 'b

BatOption.may: ('a -> unit) -> 'a option -> unit

BatOption.Monad.bind: 'a m -> ('a -> 'b m) -> 'b m

BatOption.Monad.return: 'a -> 'a m

BatOption.of\_enum: 'a BatEnum.t -> 'a option

BatOption.ord: 'a BatOrd.ord -> 'a option BatOrd.ord

BatOption.print : ('a BatInnerIO.output -> 'b -> unit) -> 'a BatInnerIO.output -> 'b t -> unit

BatPrintf.bprintf2: Buffer.t -> ('b, 'a BatInnerIO.output, unit) t -> 'b

BatPrintf.kbprintf2: (Buffer.t -> 'b) -> Buffer.t -> ('c, 'a BatInnerIO.output, unit, 'b) format4 -> 'c

BatPrintf.ksprintf2: (string -> 'b) -> ('c, 'a BatInnerIO.output, unit, 'b) format4 -> 'c

BatPrintf.sprintf2: ('a, 'b BatInnerIO.output, unit, string) format4 -> 'a

BatResult.catch : ('a -> 'e) -> 'a -> ('e, exn) t

BatResult.catch2: ('a -> 'b -> 'c) -> 'a -> 'b -> ('c, exn) t

**Batteries** BatResult.catch3: ('a -> 'b -> 'c -> 'd) -> 'a -> 'b -> 'c -> ('d, exn) t BatResult.default: 'a -> ('a, 'b) t -> 'a BatResult.get: ('a, exn) t -> 'a BatResult.Infix.( >>= ): ('a, 'e) t -> ('a -> ('c, 'e) t) -> ('c, 'e) t BatResult.is\_bad : ('a, 'e) t -> bool BatResult.is\_exn : exn -> ('a, exn) t -> bool BatResult.map\_both: ('a1 -> 'a2) -> ('b1 -> 'b2) -> ('a1, 'b1) t -> ('a2, 'b2) t BatResult.map\_default : 'b -> ('a -> 'b) -> ('a, 'c) t -> 'b BatResult.of\_option: 'a option -> ('a, unit) t BatResult.print: ('b BatInnerIO.output -> 'a -> unit) -> 'b BatInnerIO.output -> ('a, exn) t -> unit BatSeq.( -- ): int -> int -> int t BatSeq.( --- ): int -> int -> int t BatSeq.( --. ): float \* float -> float -> float t BatSeq.( --^ ): int -> int -> int t BatSeq.( --~ ): char -> char -> char t BatSeq.(@/): ('a -> 'b) -> 'a t -> 'b t BatSeq.( @// ): ('a -> 'b option) -> 'a t -> 'b t BatSeq.( /@ ) : 'a t -> ('a -> 'b) -> 'b t BatSeq.( // ) : 'a t -> ('a -> bool) -> 'a t BatSeq.( //@ ): 'a t -> ('a -> 'b option) -> 'b t BatSeq.assoc: 'a -> ('a \* 'b) t -> 'b option BatSeq.at: 'a t -> int -> 'a BatSeq.combine: 'a t -> 'b t -> ('a \* 'b) t BatSeq.enum: 'a t -> 'a BatEnum.t BatSeq.equal\_stdlib: ('a -> 'b -> bool) -> 'a t -> 'b t -> bool BatSeq.first: 'a t -> 'a BatSeq.flatten: 'att-> 'at BatSeq.fold\_right : ('a -> 'b -> 'b) -> 'a t -> 'b -> 'b BatSeq.hd: 'a t -> 'a BatSeq.last : 'a t -> 'a BatSeq.make: int -> 'a -> 'a t BatSeq.max: 'a t -> 'a BatSeq.mem : 'a -> 'a t -> bool BatSeq.min: 'a t -> 'a

**Batteries** BatSeq.nil: 'a t BatSeq.of\_list : 'a list -> 'a t BatSeq.of\_string: ?first:string -> ?last:string -> ?sep:string -> (string -> 'a) -> string -> 'a t BatSeq.print: ?first:string -> ?last:string -> ?sep:string -> ('a BatInnerlO.output -> 'b -> unit) -> 'a BatInnerlO.output -> 'b t -> unit BatSeg.reduce : ('a -> 'a -> 'a) -> 'a t -> 'a BatSeg.tl: 'a t -> 'a t BatSeq.to\_buffer: ?first:string -> ?last:string -> ('a -> string) -> Buffer.t -> (unit -> 'a node) -> unit BatSeq.to\_string : ?first:string -> ?last:string -> ?sep:string -> ('a -> string) -> 'a t -> string BatSet.any: 'a t -> 'a BatSet.at\_rank\_exn: int -> 'a t -> 'a BatSet.backwards: 'a t -> 'a BatEnum.t BatSet.cartesian\_product: 'a t -> 'b t -> ('a \* 'b) t BatSet.enum: 'a t -> 'a BatEnum.t BatSet.filter\_map\_endo: ('a -> 'a option) -> 'a t -> 'a t BatSet.is\_singleton : 'a t -> bool BatSet.map\_endo : ('a -> 'a) -> 'a t -> 'a t BatSet.of\_array: 'a array -> 'a t BatSet.of\_enum: 'a BatEnum.t -> 'a t BatSet.pop : 'a t -> 'a \* 'a t BatSet.pop\_max : 'a t -> 'a \* 'a t BatSet.pop\_min: 'a t -> 'a \* 'a t BatSet.print: ?first:string -> ?last:string -> ?sep:string -> ('a BatInnerlO.output -> 'c -> unit) -> 'a BatInnerlO.output -> 'c t -> unit BatSet.remove\_exn: 'a -> 'a t -> 'a t BatSet.split\_le: 'a -> 'a t -> 'a t \* 'a t BatSet.split\_lt: 'a -> 'a t -> 'a t \* 'a t BatSet.split\_opt: 'a -> 'a t -> 'a t \* 'a option \* 'a t BatSet.sym\_diff : 'a t -> 'a t -> 'a t BatSet.to\_array: 'a t -> 'a array BatSet.to\_list : 'a t -> 'a list BatString.backwards: string -> char BatEnum.t BatString.chop: ?l:int -> ?r:int -> string -> string BatString.contains: string -> char -> bool BatString.count\_char: string -> char -> int BatString.count\_string: string -> string -> int

**Batteries** BatString.cut\_on\_char: char-> int -> string -> string BatString.edit\_distance: t -> t -> int BatString.ends\_with\_stdlib: suffix:string -> string -> bool BatString.enum: string -> char BatEnum.t BatString.exists\_stdlib: (char -> bool) -> string -> bool BatString.explode: string -> char list BatString.filter: (char -> bool) -> string -> string BatString.filter\_map: (char -> char option) -> string -> string BatString.find: string -> string -> int BatString.find\_all: string -> string -> int BatEnum.t BatString.find\_from : string -> int -> string -> int BatString.fold\_lefti: ('a -> int -> char -> 'a) -> 'a -> string -> 'a BatString.fold\_righti: (int -> char -> 'a -> 'a) -> string -> 'a -> 'a BatString.head: string -> int -> string BatString.icompare: t -> t -> int BatString.implode: char list -> string BatString.in\_place\_mirror : Bytes.t -> unit BatString.index\_after\_n : char -> int -> string -> int BatString.is\_empty : string -> bool BatString.join: string -> string list -> string BatString.lchop: ?n:int -> string -> string BatString.left: string -> int -> string BatString.nreplace: str:string -> sub:string -> by:string -> string BatString.nsplit: string -> by:string -> string list BatString.numeric\_compare : t -> t -> int BatString.of\_backwards : char BatEnum.t -> string BatString.of\_char : char -> string BatString.of\_enum : char BatEnum.t -> string BatString.of\_float : float -> string BatString.of\_int : int -> string BatString.of\_list : char list -> string BatString.ord: t -> t -> BatOrd.order BatString.print : 'a BatInnerIO.output -> string -> unit

BatString.print\_quoted: 'a BatInnerIO.output -> string -> unit

**Batteries** 

BatString.println: 'a BatInnerIO.output -> string -> unit

BatString.quote: string -> string

BatString.rchop: ?n:int -> string -> string

BatString.repeat: string -> int -> string

BatString.replace: str:string -> sub:string -> by:string -> bool \* string

BatString.replace\_chars: (char -> string) -> string -> string

BatString.rev: string -> string

BatString.rev\_in\_place : Bytes.t -> unit

BatString.rfind : string -> string -> int

BatString.rfind\_from : string -> int -> string -> int

BatString.right : string -> int -> string

BatString.rsplit: string -> by:string -> string \* string

BatString.slice: ?first:int -> ?last:int -> string -> string

BatString.splice: string -> int -> int -> string -> string

BatString.split: string -> by:string -> string \* string

BatString.split\_on\_string : by:string -> string -> string list

BatString.starts\_with\_stdlib: prefix:string -> string -> bool

BatString.strip:?chars:string-> string-> string

BatString.tail: string -> int -> string

BatString.to\_float : string -> float

BatString.to\_int : string -> int

BatString.to\_list: string -> char list