



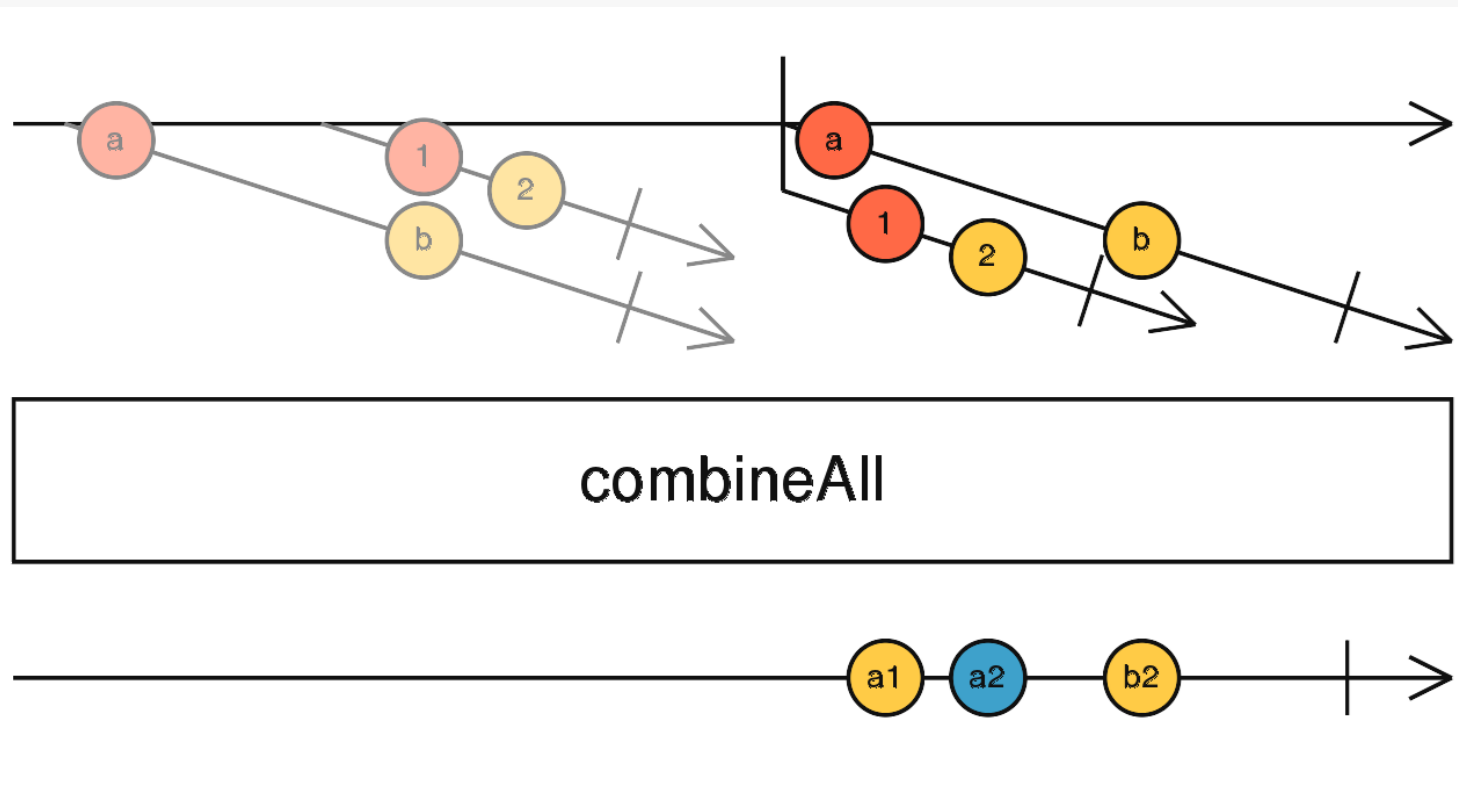
Rxjs

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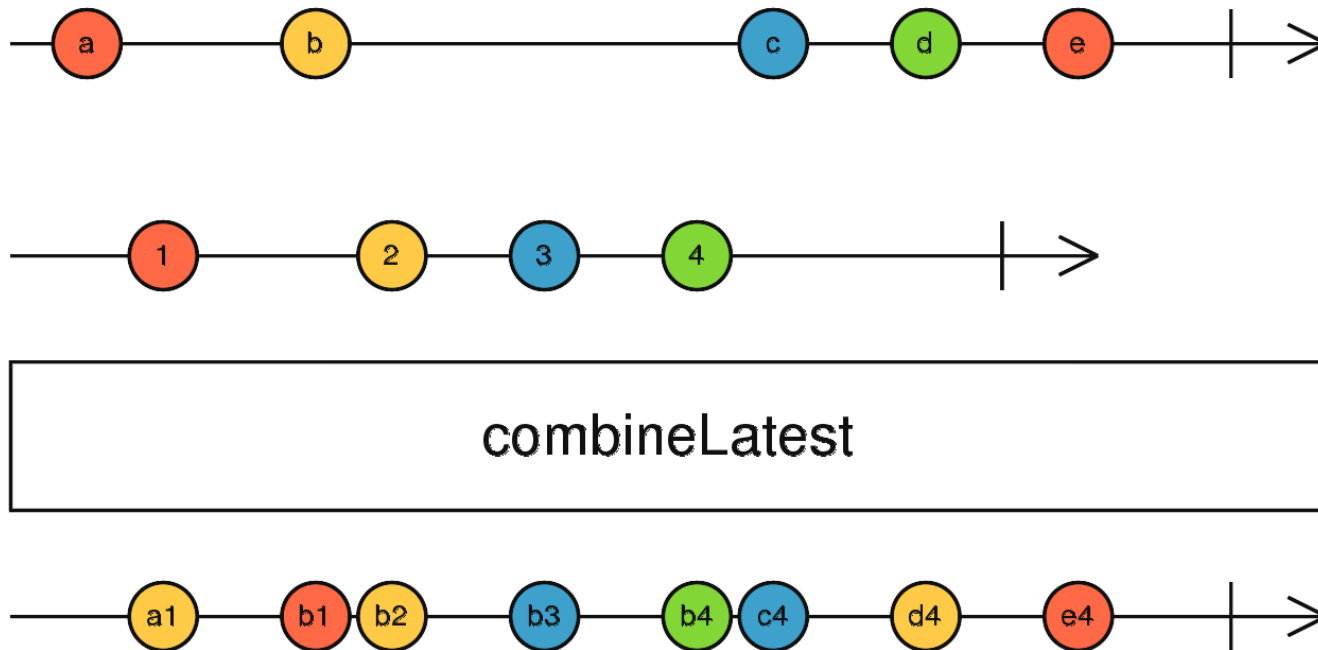
RxJs - Combination

- combineAll
- combineLatest ☆
- concat ☆
- concatAll
- endWith
- forkJoin
- merge ☆
- mergeAll
- pairwise
- race
- startWith ☆
- withLatestFrom ☆
- zip

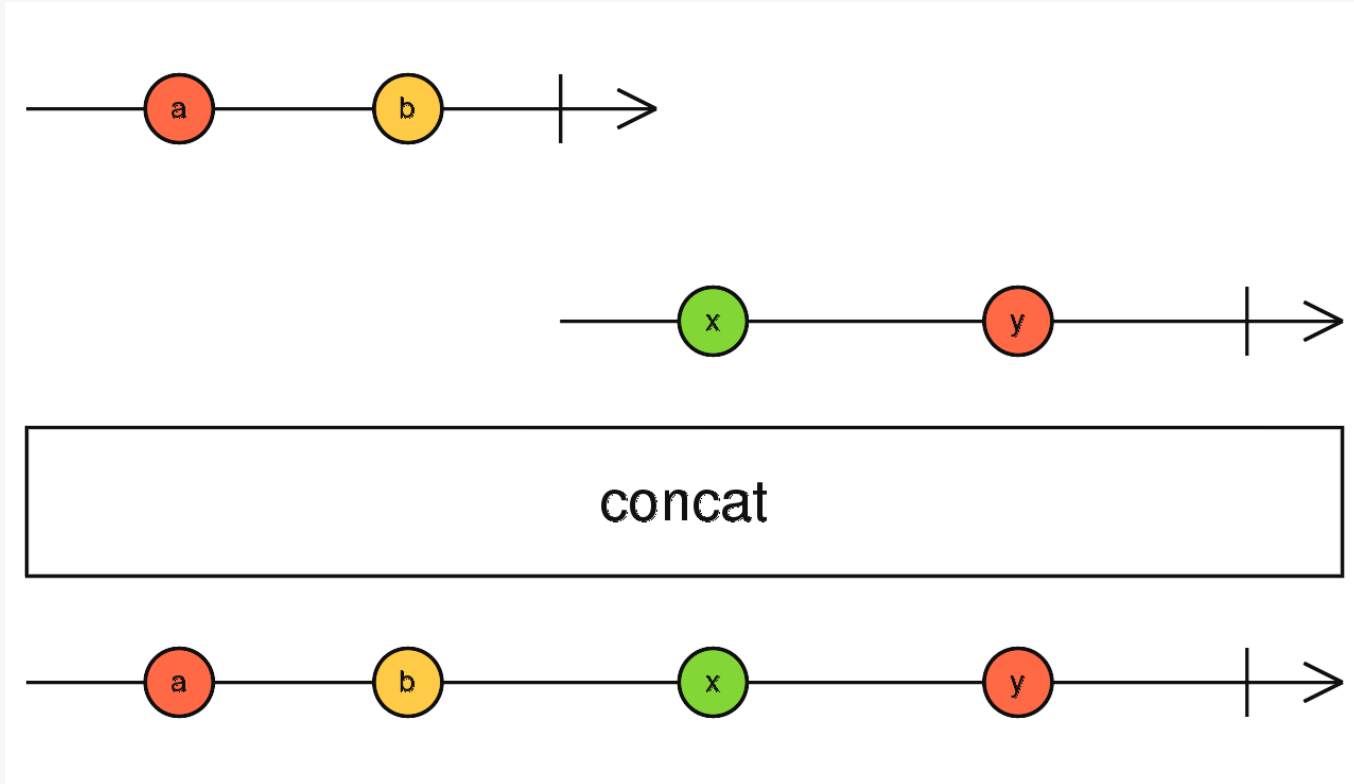
RxJs - CombineAll



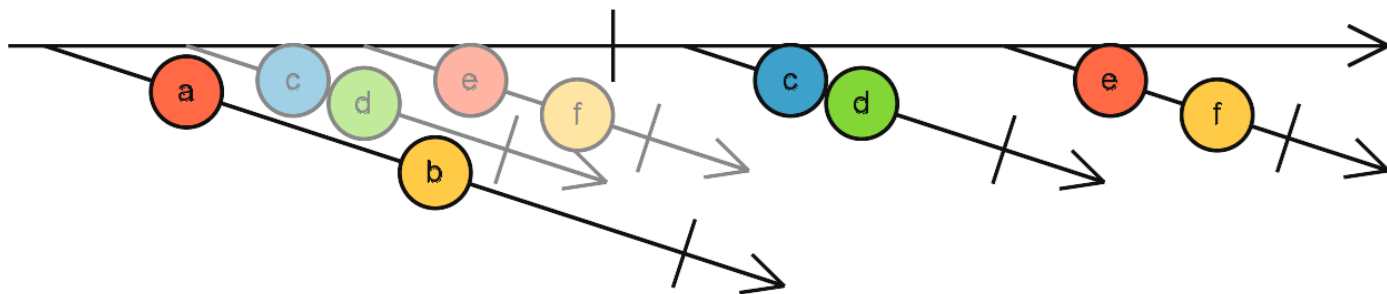
RxJs - CombineLatest



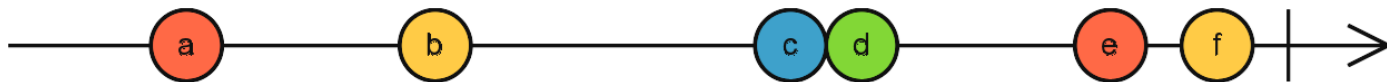
RxJs - Concat



RxJs - ConcatAll



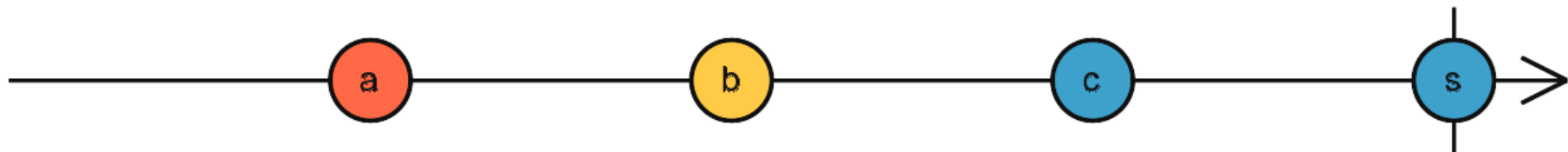
concatAll



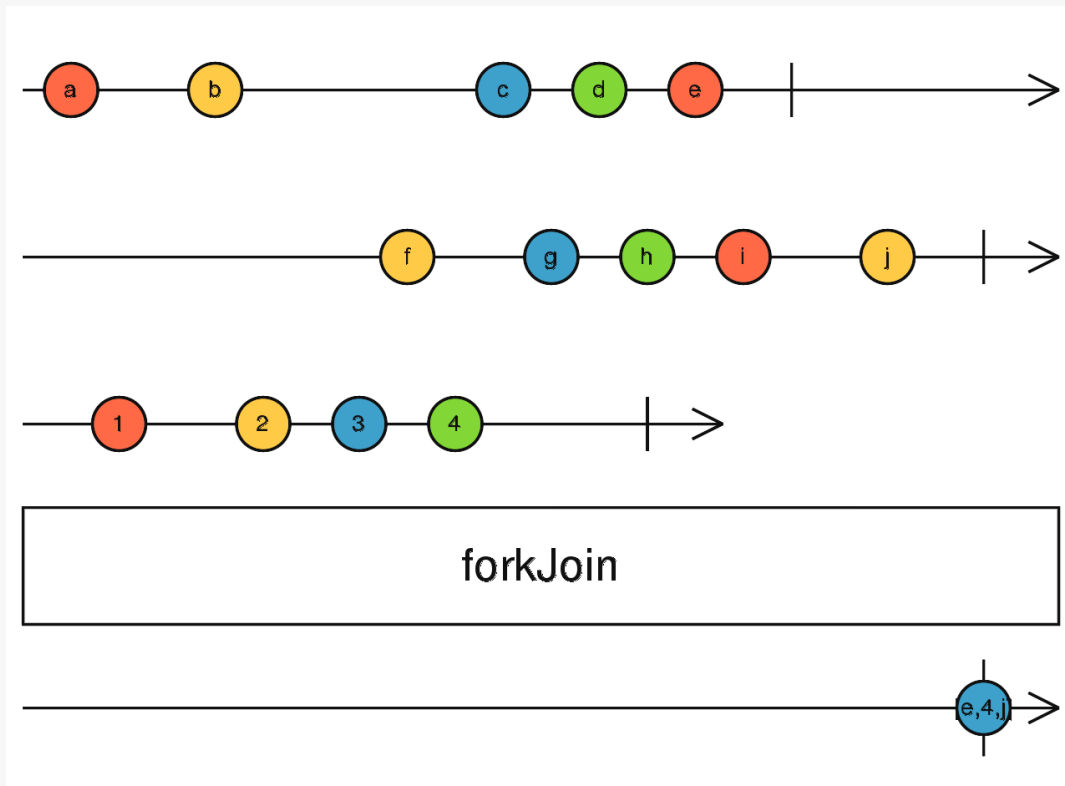
RxJs - EndWith



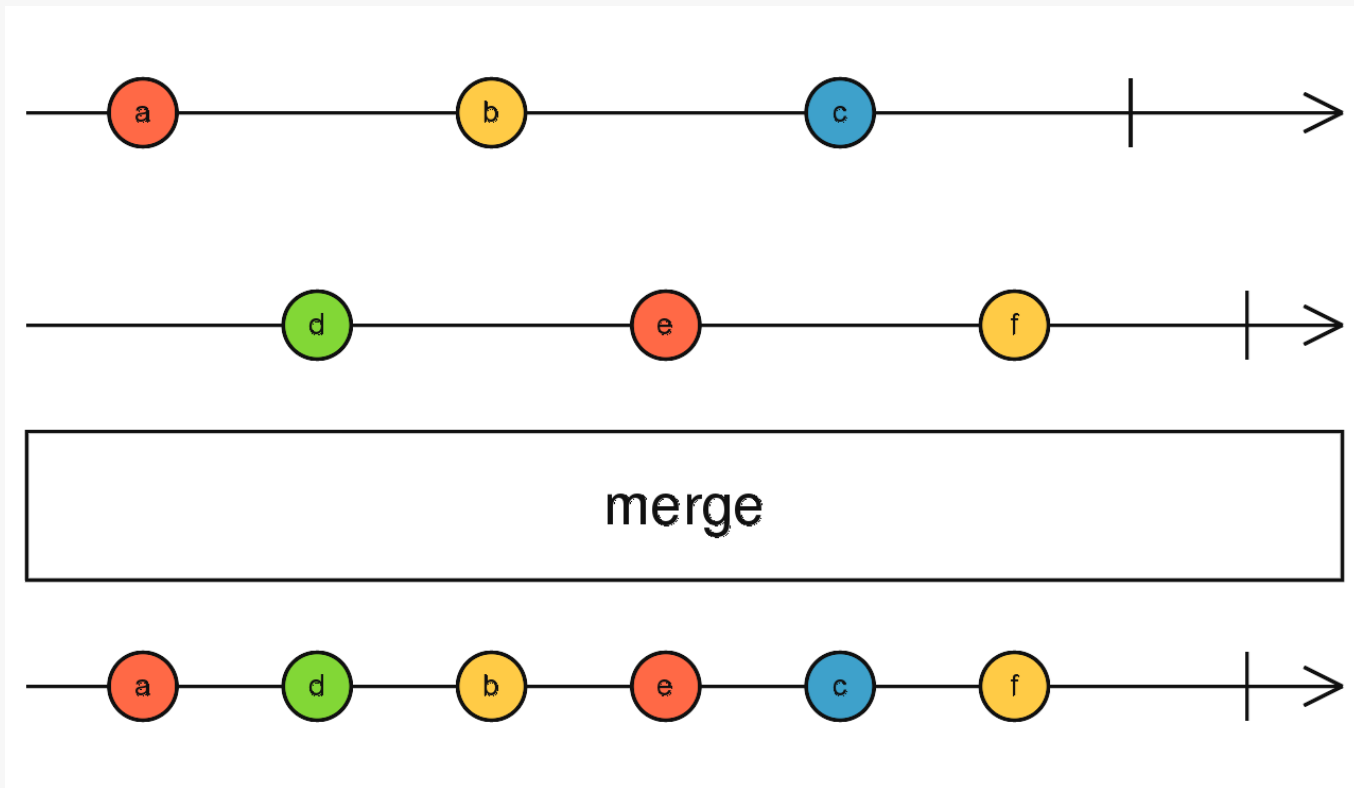
endWith(s)



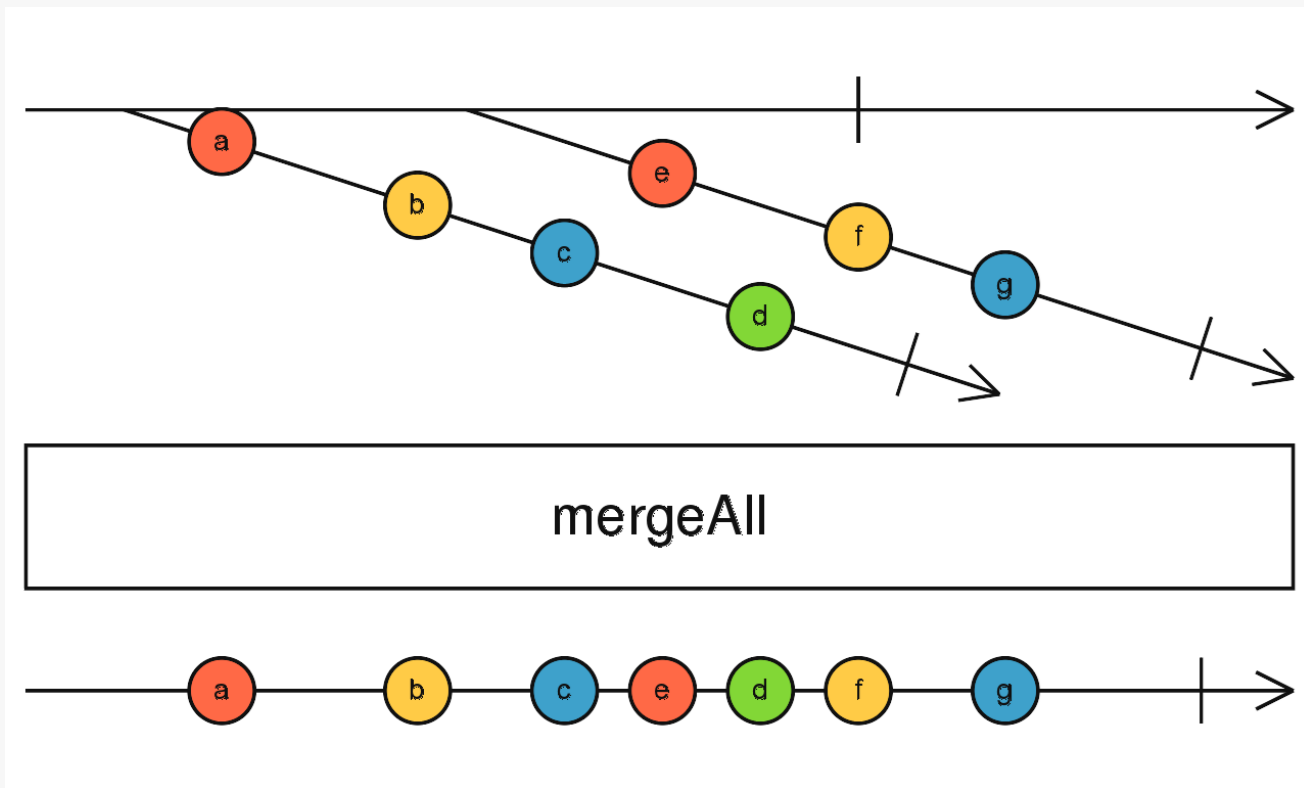
RxJs - ForkJoin



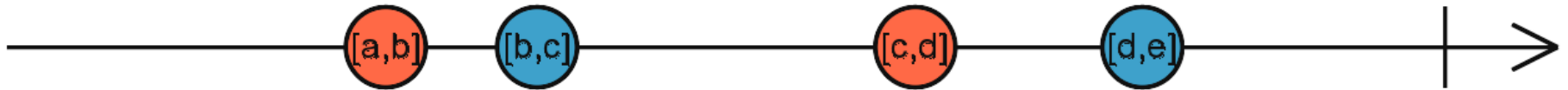
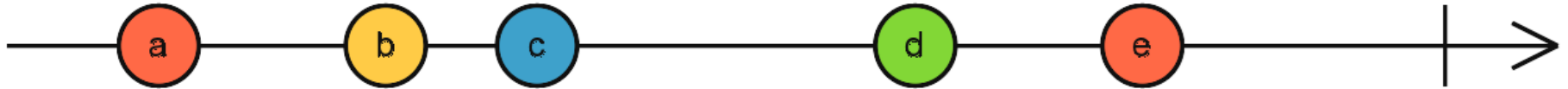
RxJs - Merge



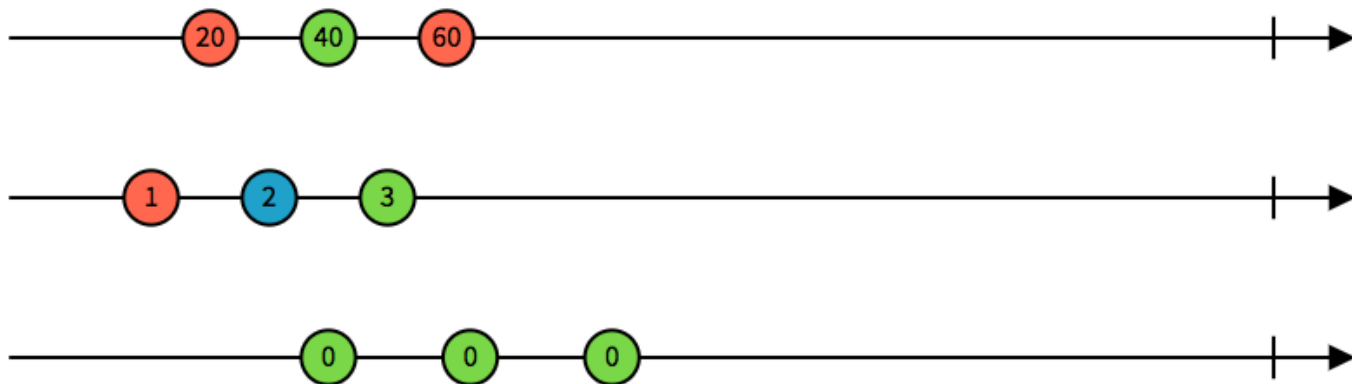
RxJs - MergeAll



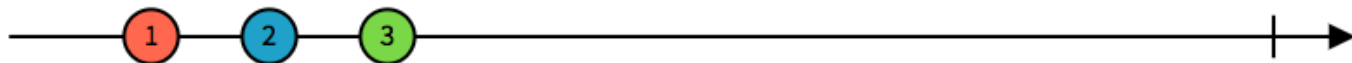
RxJs - Pairwise



RxJs - Race



race



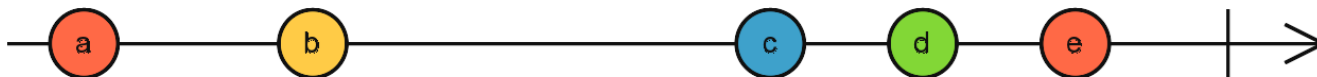
RxJs - Startwith



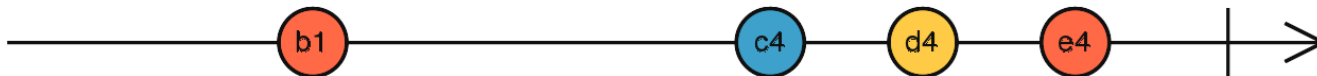
`startWith(s)`



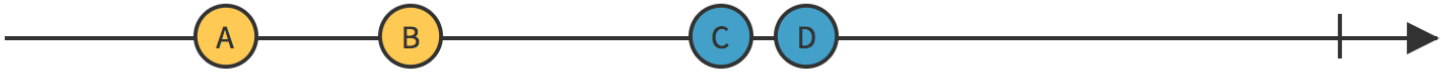
RxJs - WithLatestFrom



withLatestFrom



RxJs - Zip



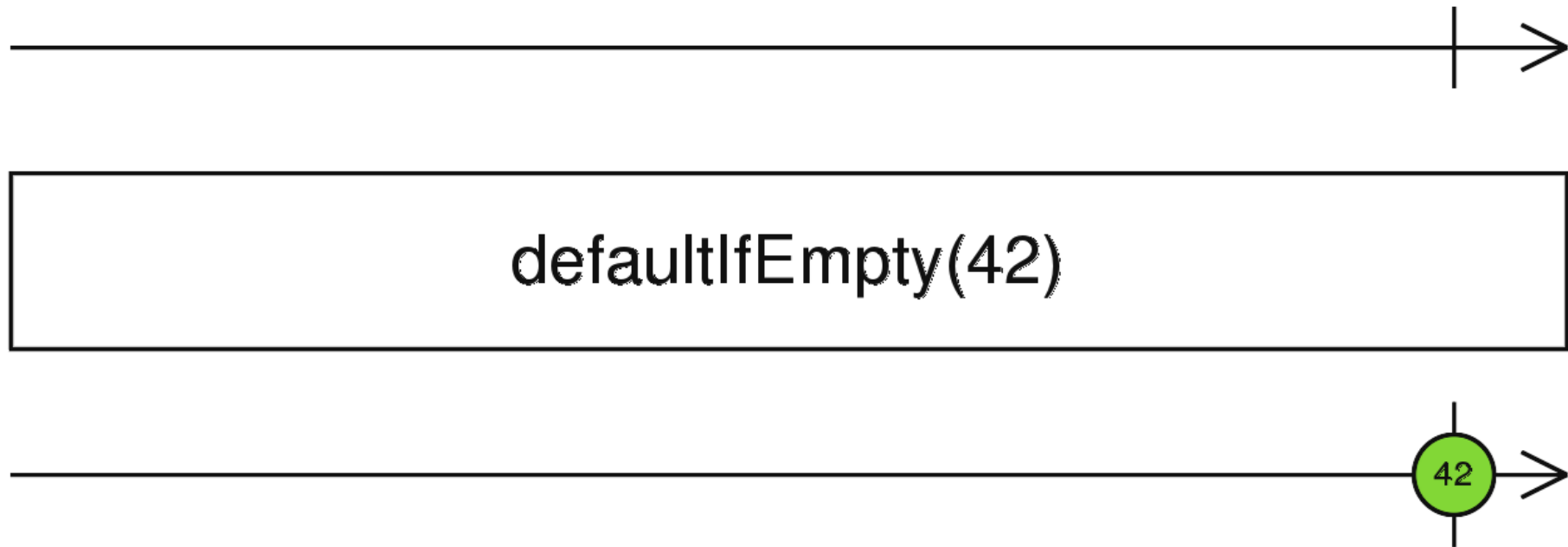
zip



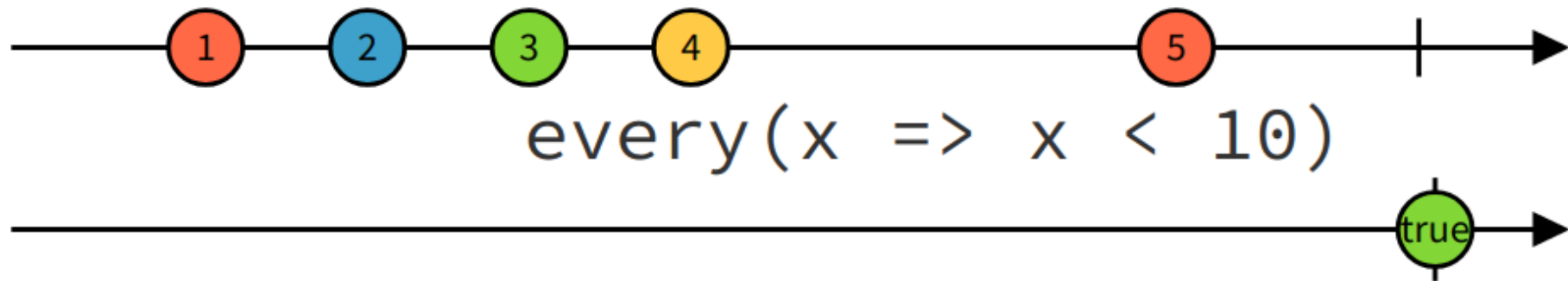
RxJs - Conditional

- `defaultIfEmpty`
- `every`
- `iif`
- `sequenceequal`

RxJs - DefaultIfEmpty



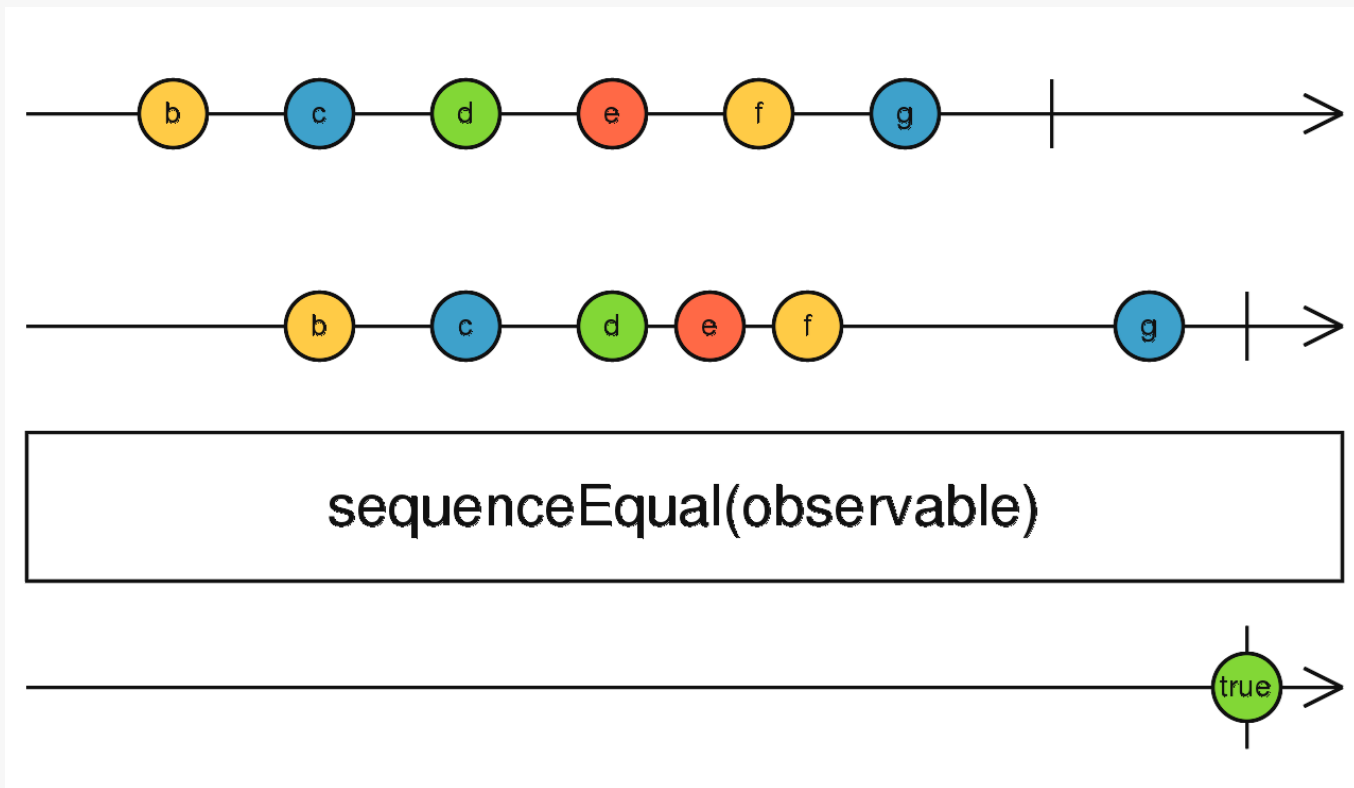
RxJs - Every



RxJs - IIF

```
const r$ = of('R');  
const x$ = of('X');  
  
interval(1000)  
  .pipe(mergeMap(v => iif(() => v % 4 === 0, r$, x$)))  
  .subscribe(console.log);  
  
// output: R, X, X, X, R, X, X, X, etc...
```

RxJs - SequenceEqual

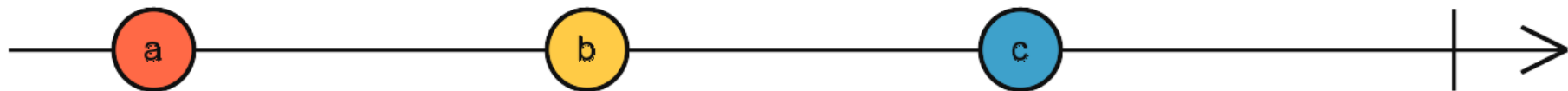


RxJs - Conditional

- ajax ☆
- create
- defer
- empty
- from ☆
- fromEvent
- generate
- interval
- of ☆
- range
- throw
- timer

RxJs - Defer

`defer() => Observable.of(a, b, c)`



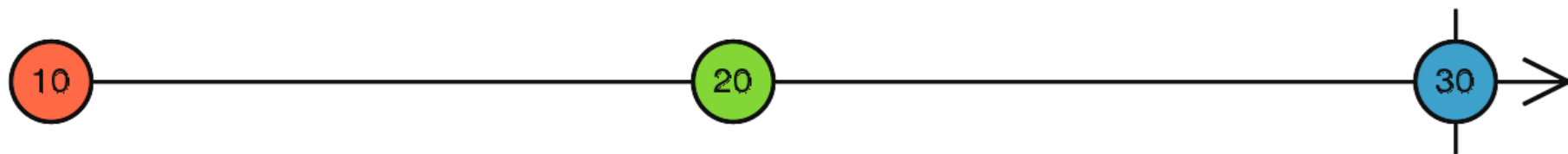
RxJs - Empty



empty

RxJs - From

`from([10, 20, 30])`



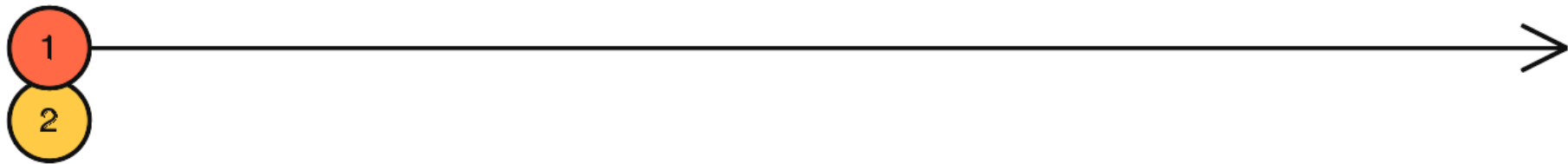
RxJs - Fromevent

```
fromEvent(element, 'click')
```



RxJs - Generate

```
generate(1, x => x < 3, x => x + 1)
```



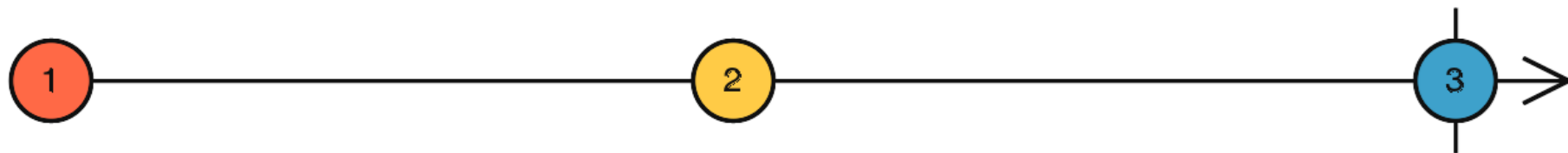
RxJs - Interval

```
interval(1000)
```



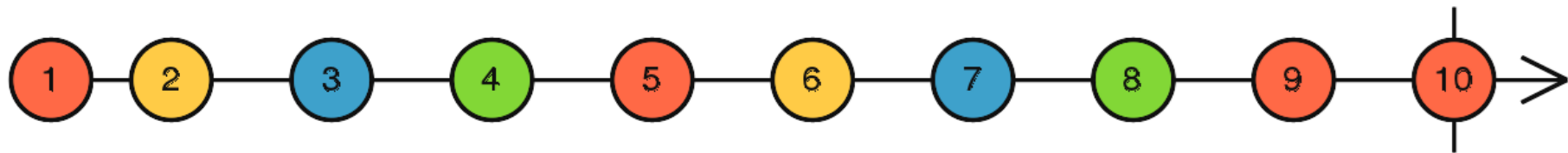
RxJs - Of

of(1, 2, 3)



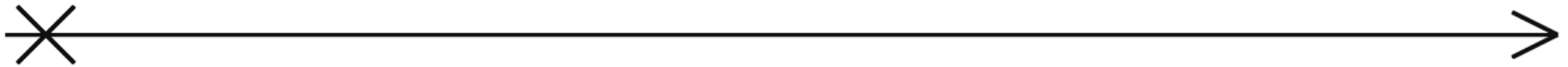
RxJs - Range

`range(1, 10)`



RxJs - throw

throw(e)



RxJs - timer

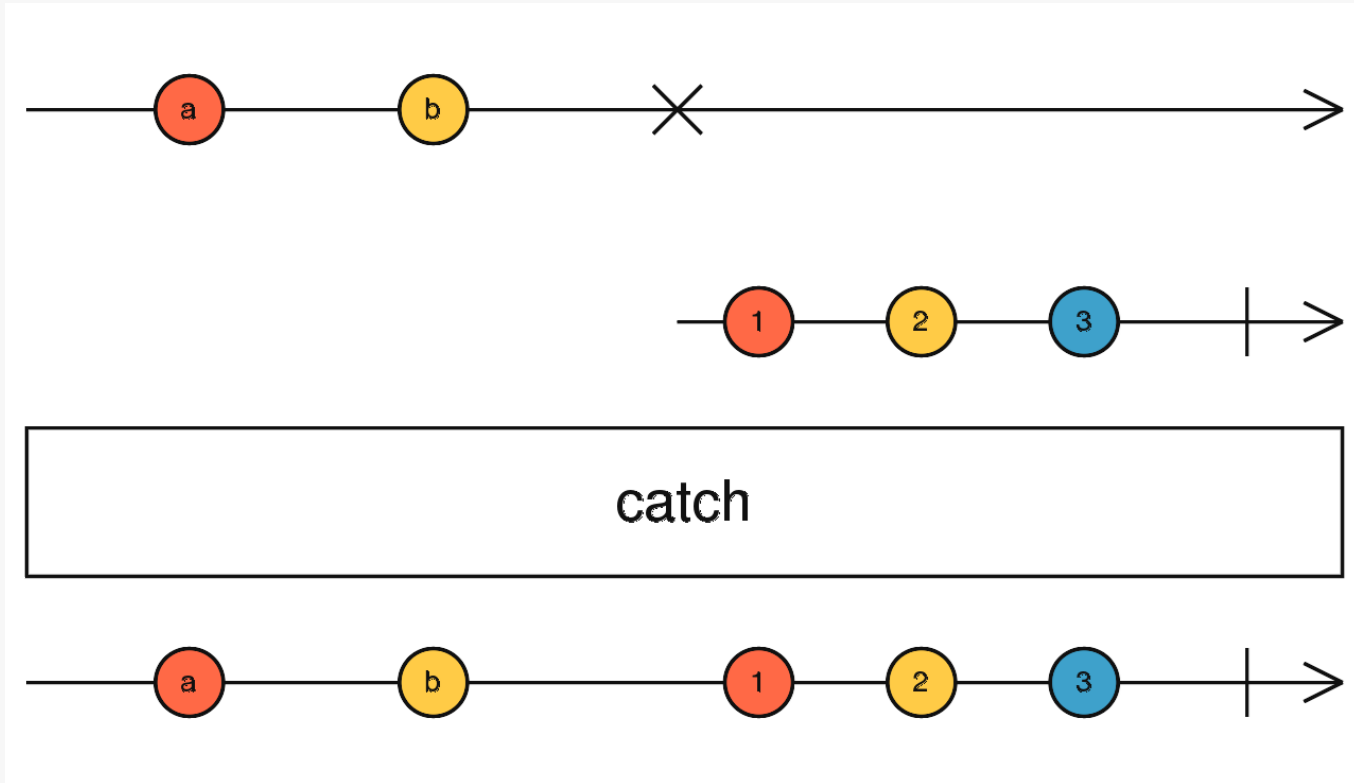
```
timer(3000, 1000)
```



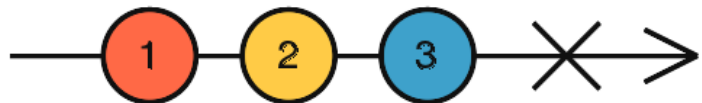
RxJs - Error Handling

- `catch / catchError` ☆
- `retry`
- `retryWhen`

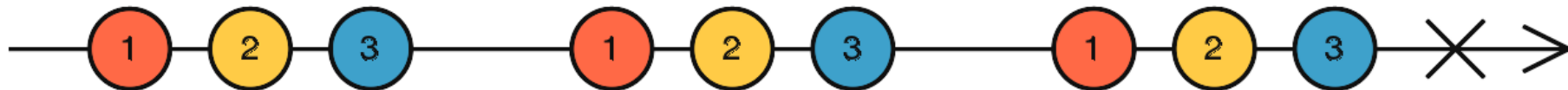
RxJs - Catch



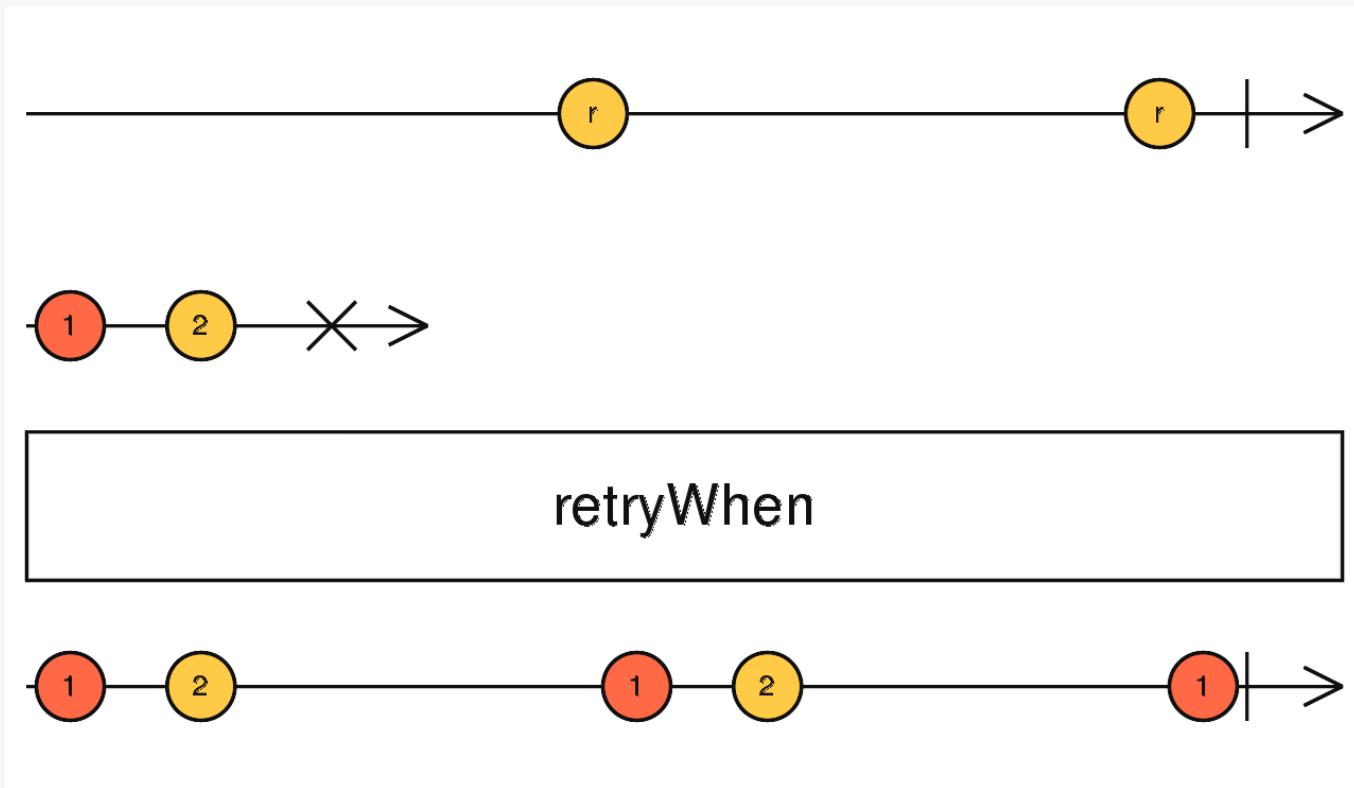
RxJs - Retry



retry(2)



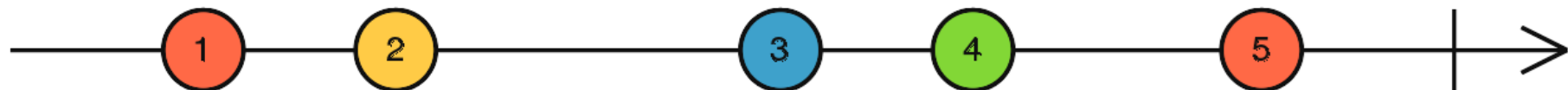
RxJs - RetryWhen



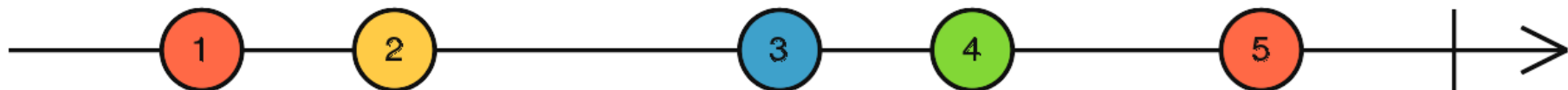
RxJs - Multicasting

- publish
- multicast
- share ☆
- shareReplay ☆

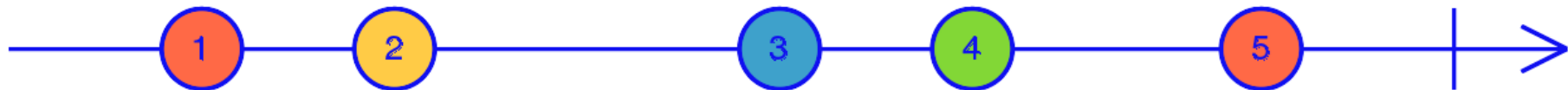
RxJs - Publish



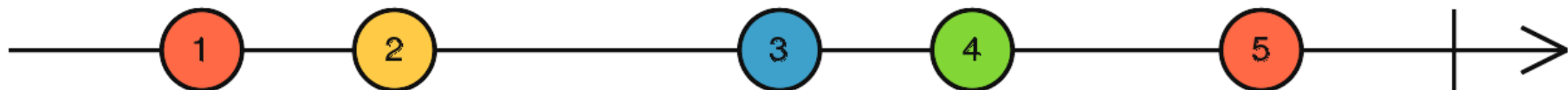
RxJs - Multicast



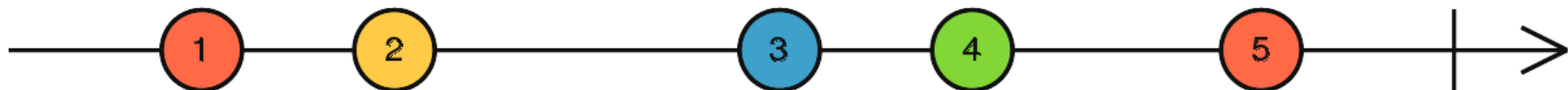
`multicast() => new Subject<string>()`



RxJs - ShareReplay



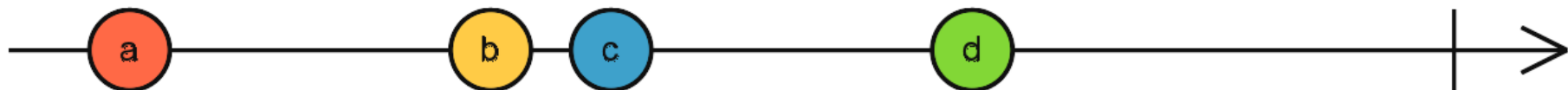
RxJs - Share



RxJs - Filtering

- audit
- auditTime
- debounce
- debounceTime ☆
- distinct
- distinctUntilChanged ☆
- distinctUntilKeyChanged
- filter ☆
- find
- first
- ignoreElements
- last
- sample
- single
- skip
- skipUntil
- skipWhile
- take ☆
- takeLast
- takeUntil ☆
- takeWhile
- throttle
- throttleTime

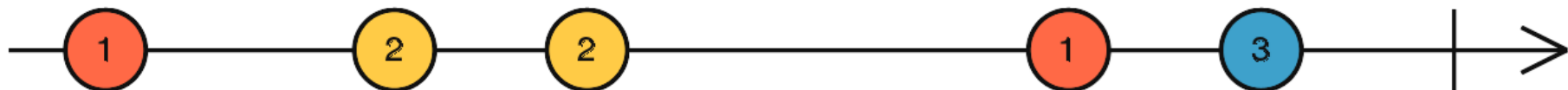
RxJs - DebounceTime



`debounceTime(20)`



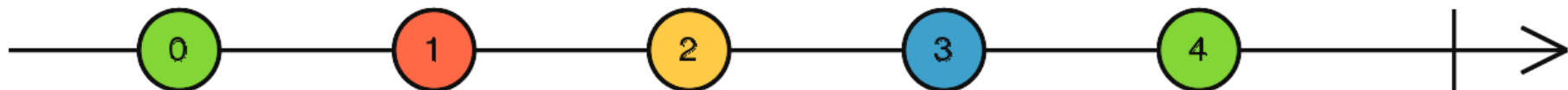
RxJs - DistinctUntilChanged



distinctUntilChanged



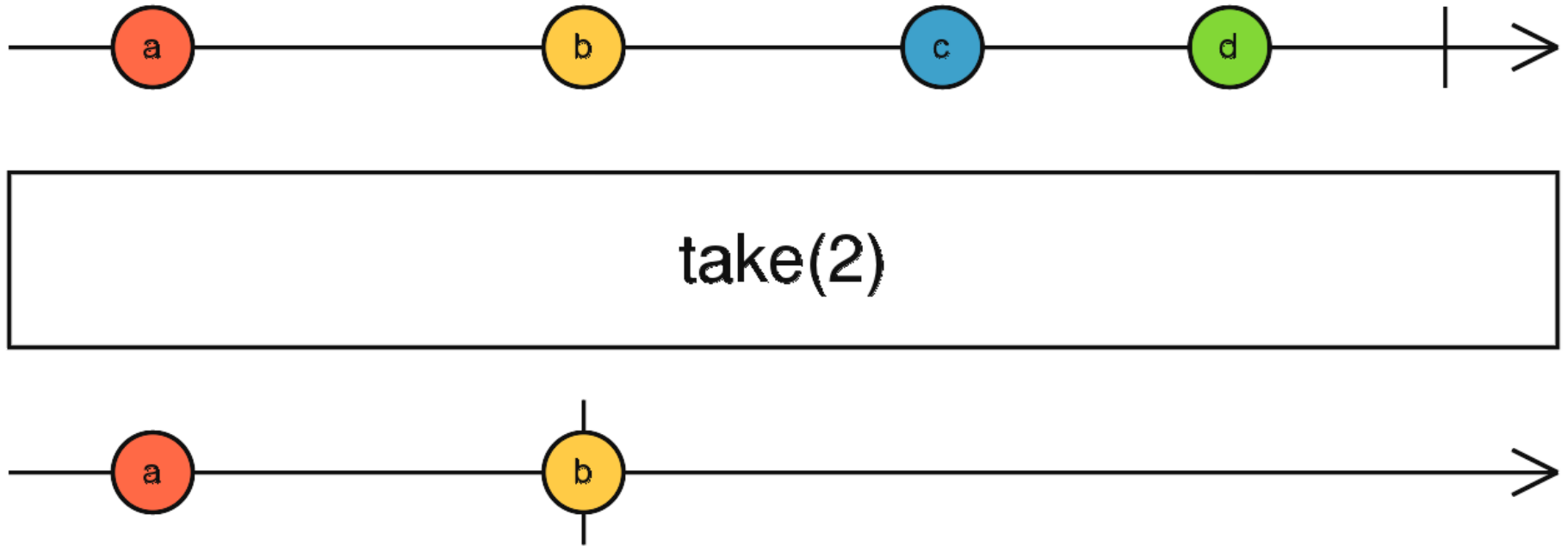
RxJs - Filter



```
filter(x => x % 2 === 1)
```



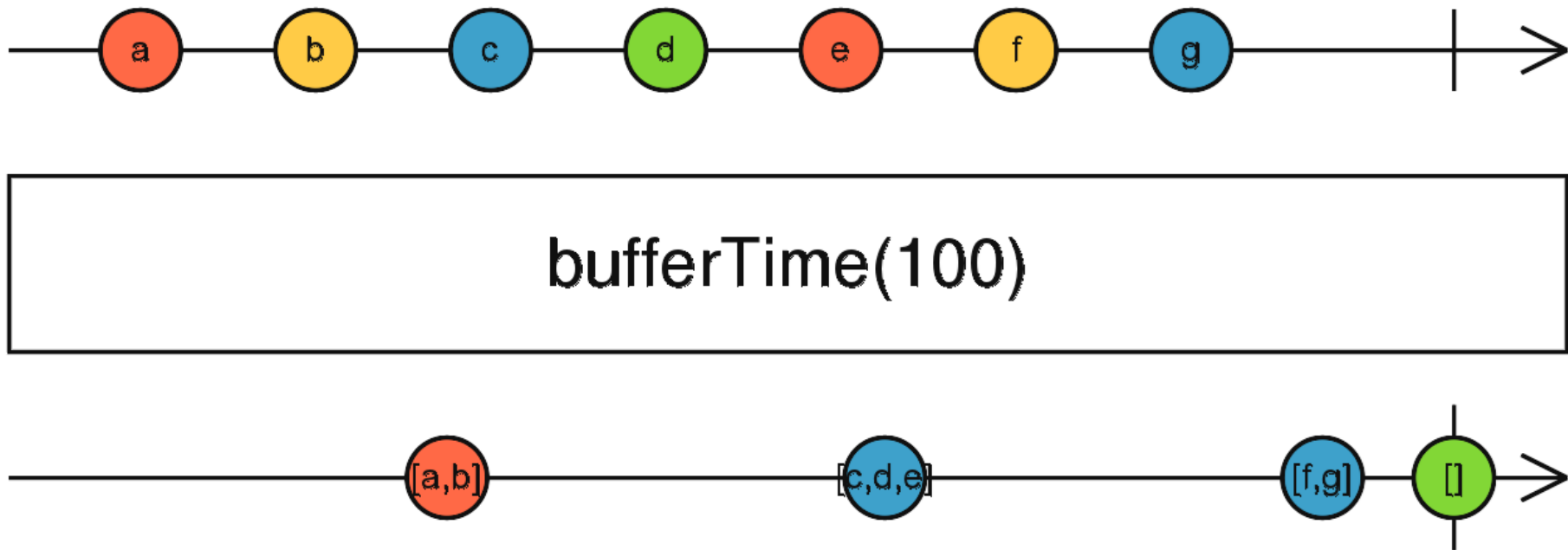
RxJs - Take



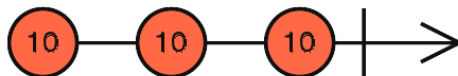
RxJs - Trasformation

- buffer
- bufferCount
- bufferTime ☆
- bufferToggle
- bufferWhen
- concatMap ☆
- concatMapTo
- exhaustMap
- expand
- groupBy
- map ☆
- mapTo
- mergeMap / flatMap ☆
- mergeScan
- partition
- pluck
- reduce
- scan ☆
- switchMap ☆
- switchMapTo
- toArray
- window
- windowCount
- windowTime
- windowToggle
- windowWhen

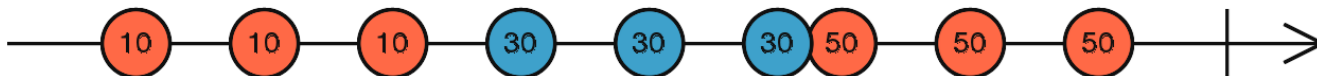
RxJs - BufferTime



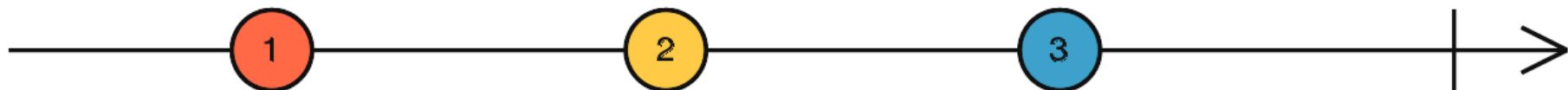
RxJs - ConcatMap



`concatMap(i => 10*i——10*i——10*i—|)`



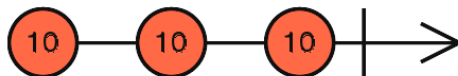
RxJs - Map



`map(x => 10 * x)`



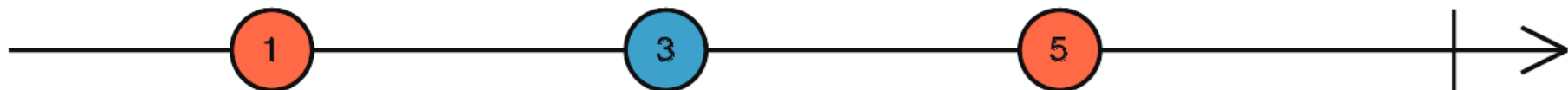
RxJs - FlatMap



`mergeMap(i => 10*i——10*i——10*i—|)`



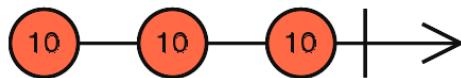
RxJs - Scan



`scan((acc, curr) => acc + curr, 0)`



RxJs - SwitchMap



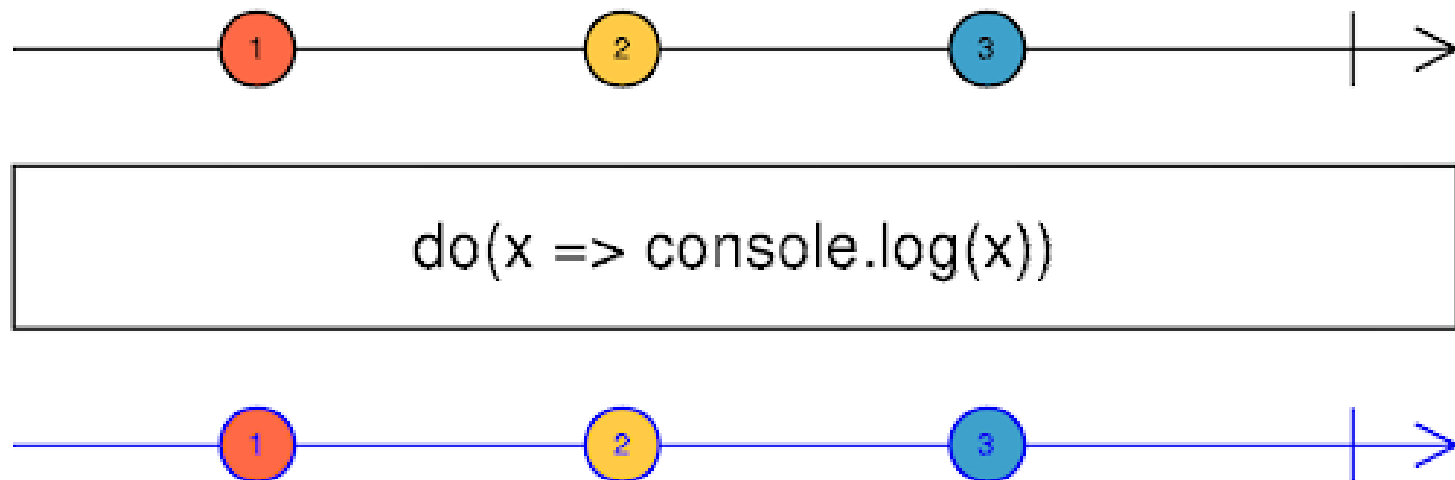
`switchMap(i => 10*i——10*i——10*i—|)`



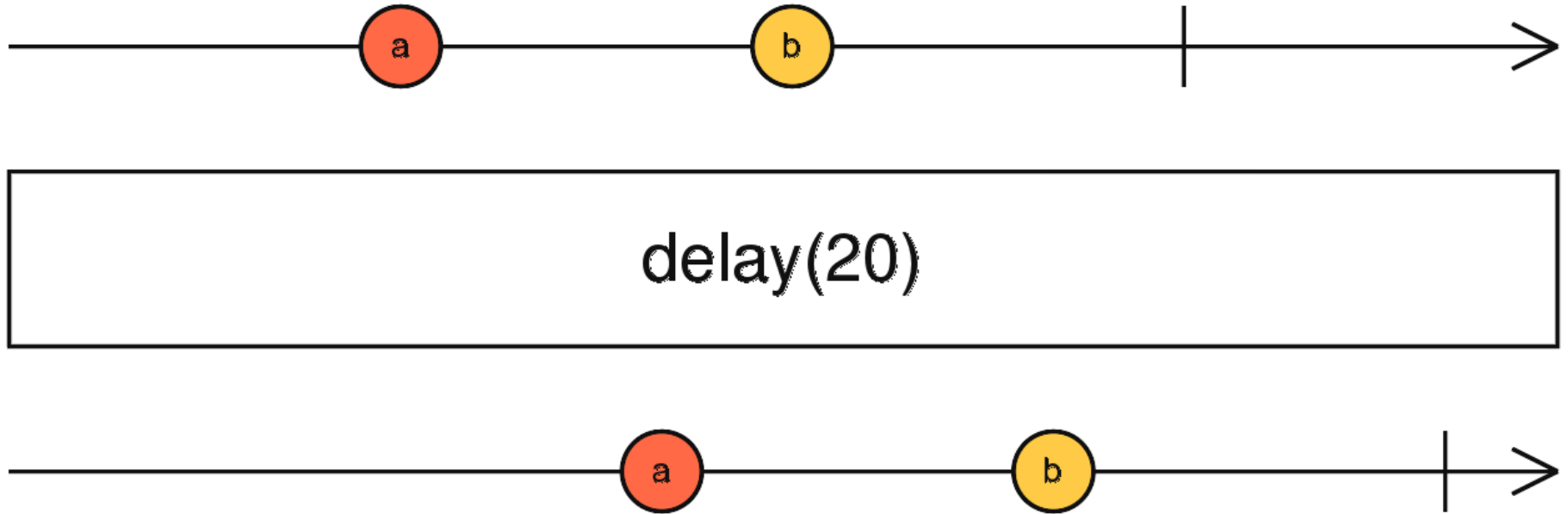
RxJs - Utility

- `tap / do` ☆
- `delay` ☆
- `delayWhen`
- `dematerialize`
- `finalize / finally`
- `let`
- `repeat`
- `repeatWhen`
- `timeInterval`
- `timeout`
- `timeoutWith`
- `toPromise`

RxJs - Tap



RxJs - Delay



RxJs - Subjects

- **Subject** - Nessun valore iniziale.
- **AsyncSubject** - Emette l'ultimo valore dell'observable quando è completato.
- **BehaviorSubject** - Richiede un valore iniziale ed emette ai sottoscrittori il suo ultimo valore.
- **ReplaySubject** - Come precedente ma emette un numero fissato di valori e non solo l'ultimo.

DEMO



almaviva.it