

```
# A list of sequences converted into k-mer counts.
records: list[KmerSeq]
shuffle(records)

# The minimum size of the divergent set.
min_size: int

# The maximum size of the divergent set.
max_size: int

sr = SummedRecords.from_records(records[:min_size])
for r in records:
    if sr.increases_jsd(r):
        # Adding r to the N-1 set increased JSD over sr.jsd.
        # We define a new SummedRecords instance of {N} & {r}.
        nsr = sr + r
        # Has adding r increased the standard deviation?
        sr = nsr if nsr.std > sr.std else sr.replaced_lowest(r)
    if sr.size > max_size:
        # We stay within the user specified set size
        # by dropping the record with lowest delta-JSD.
        sr = sr.dropped_lowest()
```