

Fixed Size Storage

- 1. Storage for reviews, ordered by docIDs
- 2. Storage for (docIdStart, docIdEnd), ordered by productIDs

1. Compact Review Storage

Index = docID + 1

productID(10B)	helpfulness numerator (2B)	helpfulness denominator (2B)	score (1B)	
Z123456789	5	7	3	← first document
B123456789	0	1	2	← second document
...	

2. docID pair storage

Ordered by productIDs (which by themselves are not stored)
Indices have no direct meaning, but can apply binary search via productIDs(by referencing the compact storage)

range of reviews with lowest(by lexicographic order) productID
e.g A123456789



fromDocId	toDocId
200	210
40	45
...	...
170	170

range of products with highest(by lexicographic order) productID
e.g Z999999999

