

CS/INFO 4300: Language and Information --- Postings merge algorithm quiz

Name:

Netid:

Apply the merge algorithm twice to get the documents containing “kim” AND “kourtney” AND “born”.

Please show your work by drawing a line for each comparison.

“kim” postings: [0, 6, 7, 8, 10, 11, 12, 19, 27, 31, 33, 39]

“kourtney” postings: [0, 7, 9, 26, 27, 39]

“born” postings: [0, 3, 4]

Intermediate merged posting:

Final merged postings:

Submit this side on CMS when instructed.

Postings Merge Algorithm

Inputs: postings list A, postings list B

Initialize empty list (called merged list M)

Start: Pointer at the first element of both A and B

Do: Does it point to the same document ID in each list?

Yes: Append document ID to M, advance pointer in both A and B

No: Advance (to the right) the pointer with the smaller ID

End: When we attempt to advance a pointer already at the end of its list