

**Attempt this question based on the lecture (use the same assumptions and approach).  
Given the following search statement (Students best programming language)**

- What are the terms you will need to perform this query (or term posting lists)?**

The terms are: "Students", "Best", "Programming", "Language"

- What operation is this (And, OR, something else)?**

Operation is: AND

- Write a general description of the algorithm you will need to implement to perform this retrieval, assuming you have the terms you needed from part one. You may write a description or an algorithm, whatever you prefer. Or you could draw it and take a picture and attach it to your answer.**

Class Reducer

Method Initialize

```
Tprev  $\leftarrow \emptyset$  // previous term
P  $\leftarrow$  new PostingsList // empty postings list to hold document id
```

Method Reduce((t,n), [f])

```
If (t  $\neq$  tprev AND tprev  $\neq \emptyset$ ) then
    Emit(term tprev, postings P) // emit current postings list
    P.reset() // reset postings list for new term
    P.add(new Pair(n,f)) // add current docid and frequency
    Tprev  $\leftarrow$  t // update tprev
```

Method Close

```
Emit(term tprev; postings P) // emit the final postings list
```