Sort-based Inversion

Sort by doc-id

Sort by term-id

All info about term 1

doc1

$\langle 1,\mathbf{1},3 \rangle$
$\langle 2,\mathbf{1},2 \rangle$
$\langle 3,\mathbf{1},1 \rangle$
...
$\langle 1,\mathbf{2},2 \rangle$
$\langle 3,\mathbf{2},3 \rangle$
$\langle 4,\mathbf{2},2 \rangle$
...

doc2

$\langle \mathbf{1},1,3 \rangle$
$\langle \mathbf{1},2,2 \rangle$
$\langle \mathbf{2},1,2 \rangle$
$\langle \mathbf{2},4,3 \rangle$
...
$\langle \mathbf{1},5,3 \rangle$
$\langle \mathbf{1},6,2 \rangle$
...

$\langle \mathbf{1},1,3 \rangle$
$\langle \mathbf{1},2,2 \rangle$
$\langle \mathbf{1},5,2 \rangle$
$\langle \mathbf{1},6,3 \rangle$
...
$\langle \mathbf{1},300,3 \rangle$
$\langle \mathbf{2},1,2 \rangle$
...

Term Lexicon:

the 1
campaign 2
news 3
a 4

…

· · ·

doc300

$\langle 1,\mathbf{300},3 \rangle$
$\langle 3,\mathbf{300},1 \rangle$
...

$\langle \mathbf{1},299,3 \rangle$
$\langle \mathbf{1},300,1 \rangle$
...

$\langle \mathbf{5000},299,1 \rangle$
$\langle \mathbf{5000},300,1 \rangle$
...

DocID Lexicon:

doc1 1
doc2 2
doc3 3

…

Parse & Count   **"Local" Sort**   **Merge Sort**

4