Q1.

Build inverted index using the "Modified" Algorithm.

Input Split 1 (Doc ID 101) [ cat pat mat sat cat eat ]

Input Split 2 (Doc ID 201)  [ pat mat sat pat mat eat]

Input Split 3 (Doc ID 301) [ sat mat cat pat fat mat]

Assume three Mappers and two Reducers.

Let cat mat and sat be processed by Reducer 1 and rest by Reducer 2.