1. Given the following postings list with DocIDs
   \( \rightarrow 3 \ 515 \ 520 \)
   encode this list with a gap encoding using
   (a) VB Code
   (b) Gamma Code

2. Compute the ranks for documents using the tf-idf model. The vector of
document 1 is \((2, 0, 1, 2, 0, 0)\) for the terms \(t_1, t_2, t_3, t_4, t_5,\) and \(t_6\). The vec-
tor of document 2 is \((0, 3, 2, 1, 1, 1)\). The document vectors already contain
the tf-values of the terms. The query vector is equal to \((0, 0, 0, 3, 0, 4)\) and
already contains the idf-values. Assume that you have to do no further
normalization.