Algorithm that extract *K* topics from *M* documents. The following steps give explanation of mathematics of feature extraction by Topic Modellling technique-

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1. Initialize the necessary parameters.

2. For each document, randomly initialize each word to one of the K topics.

3. Start an iterative process as follows and repeat it several times.

4. For each document D:

    a. For each word W in document:

        i) For each topic T:

            1.   Compute P({T|D), which is proportion of words in D assigned to topic T.
            2.   Compute P(W|T), which is proportion of assignments to topic T over all documents having the word W.

       ii) Reassign word W with topic T with probability P(T|D) x P(W|T) considering all other words and their topic assignments.

As a mention topic model for feature extraction performs somewhat better than other feature extraction models.