Distributional Models for Lexical Semantics
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Assignment 1 (due by email to denis.paperno@gmail.com on 5.09.2017)

Below are distributional vectors of cooccurrence counts for three words of English: *king, woman,* and *queen* (in a shuffled order).

	Context 1	Context 2	Context 3	Context 4	Context 5
Word 1	10	82	0	4	275
Word 2	85	5	4	0	8
Word 3	237	20	4	1	9

1. Which of the three vectors corresponds to each of the three words (*king, woman,* and *queen*)? How did you tell?

Hint: you can rely on vector similarity as computed by the cosine measure.

2. (optional) The contexts in this example are words *knighthood, delivery, says, child,* and *crowned* (in a shuffled order), as observed within a 5-word window around the target word. Can you identify which of these context words correspond to each column in the cooccurrence matrix above? Even if you are not sure about the complete answer, make an educated guess for some of the contexts and argue for it.