Beam Search — Algorithm

1. Begin with a single empty hypothesis in the beam.
2. In each time step:
   2.1 Extend all hypotheses in the beam by k most probable words (we call these <u>candidate hypotheses</u>).
   2.2 Sort the candidate hypotheses by their score.
   2.3 Put the best k hypotheses in the new beam.
   2.4 If a hypothesis from the beam reaches the end-of-sentence symbol, we move it to the list of finished hypotheses.
3. Finish (1) at the final time step or (2) all k-best hypotheses end with </s>.