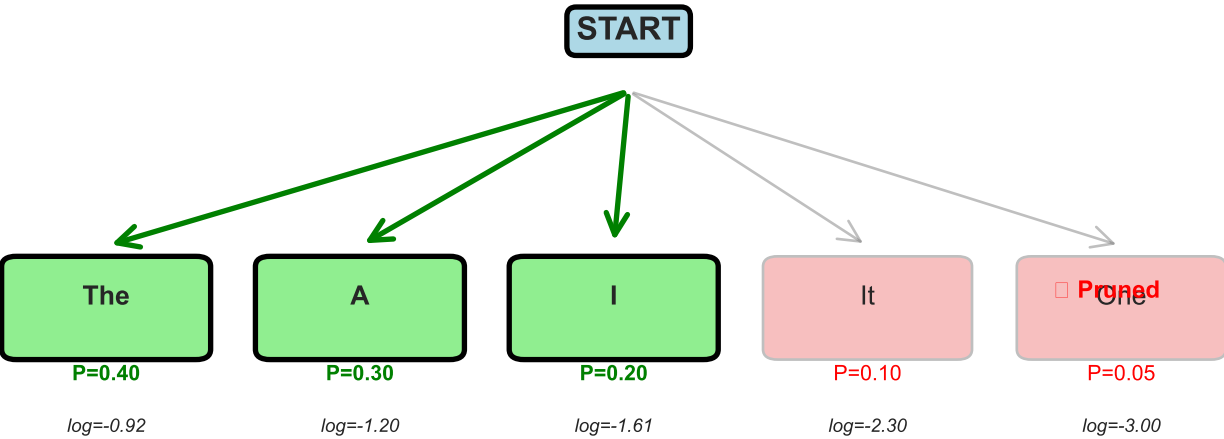


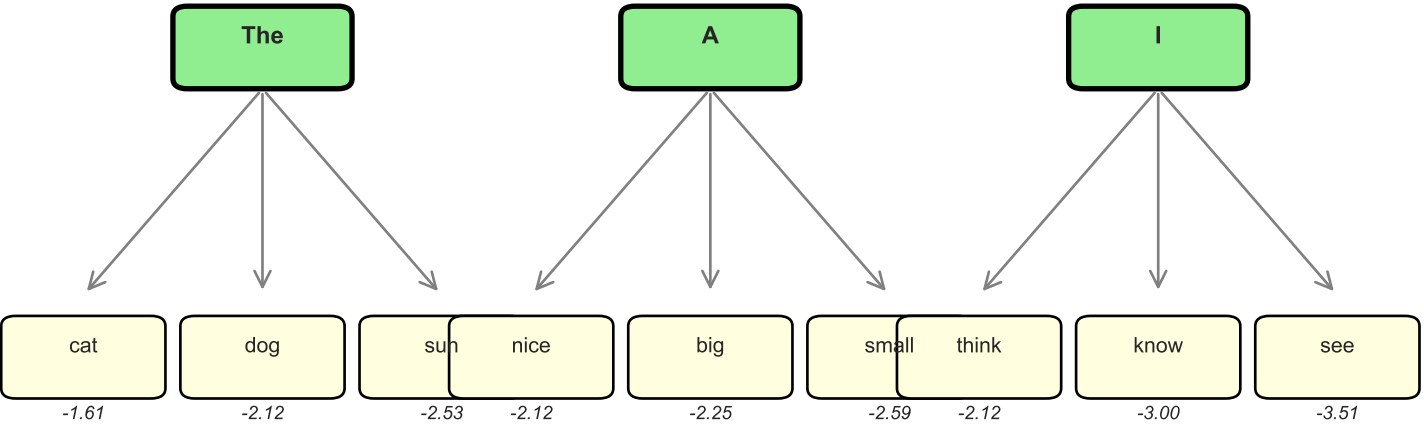
Beam Search Step-by-Step (beam\_size=3)

Step 1: Generate First Word



Keep top 3 → The, A, I

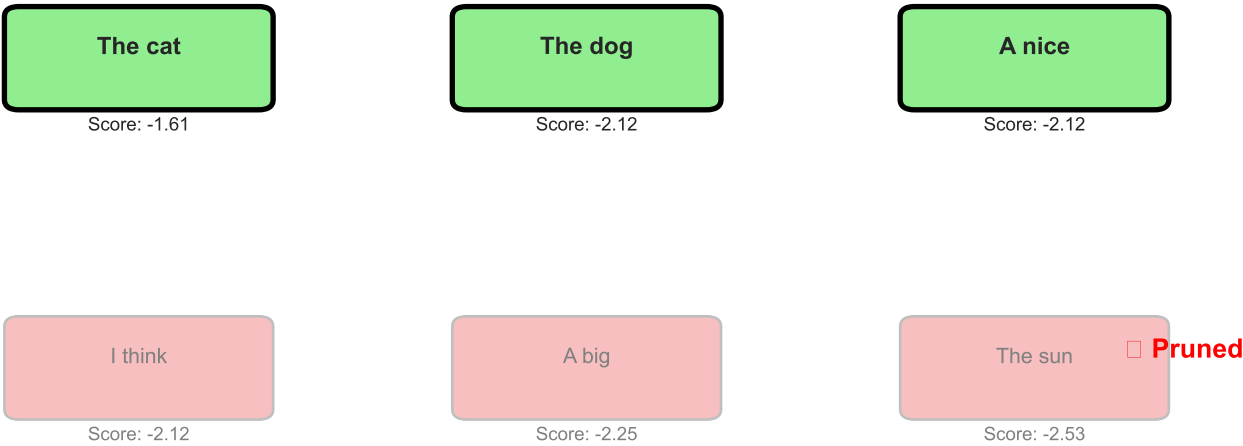
Step 2: Expand Top 3 Hypotheses



Top 3: The cat (-1.61), The dog (-2.12), A nice (-2.12)

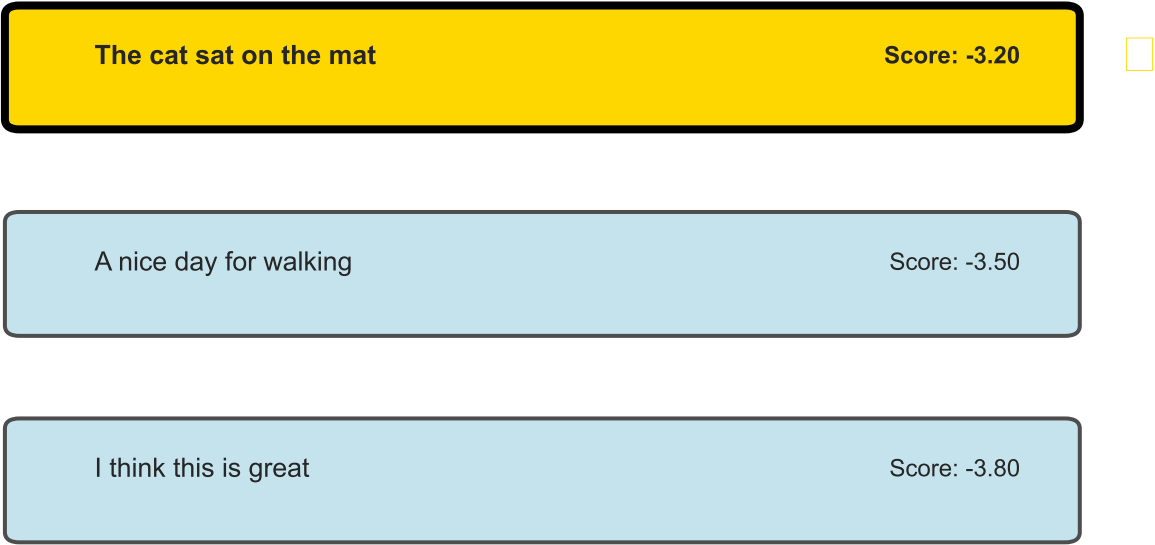
9 candidates → keep top 3

Step 3: Prune and Continue



Only keep top 3 hypotheses at each step

Step 4: Select Best Complete Sequence



Select highest-scoring complete sequence