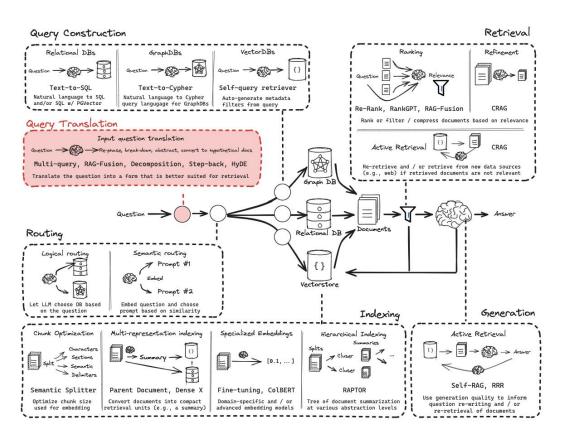


# RAG from scratch: Query Translation (Step-back)

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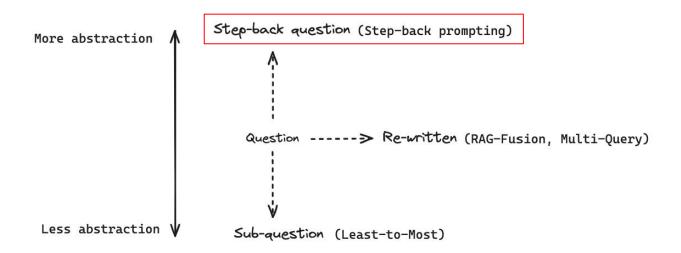


## **Query Translation**





### General approaches to transform questions





#### Few shot prompt to produce more abstract step-back question

#### Knowledge QA Final-Answer Prompt

You are an expert of world knowledge. I am going to ask you a question. Your response should be comprehensive and not contradicted with the following context if they are relevant. Otherwise, ignore them if they are not relevant.

<Passage from original retrieval augmentation>

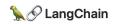
<Passage from step-back retrieval augmentation>

Original Question: <Original Question>
Answer:

Table 12: Prompt of querying the model for final answer with additional contexts from original and step-back retrieval augmentations in TimeQA and SituatedQA

dataset	Original Question	Step-back Question
MuSiQue	at year saw the creation of the region where the county of Hertfordshire is located?	which region is the county of Hert- fordshire located?
MuSiQue	Jan Šindel's was born in what country?	what is Jan Šindel's personal history?
MuSiQue	When was the abolishment of the studio that distributed The Game?	which studio distributed The Game?
MuSiQue	What city is the person who broadened the doctrine of philosophy of language from?	who broadened the doctrine of philosophy of language

https://arxiv.org/pdf/2310.06117.pdf



Code walk-through