Prompt: You are provided with [frame captions] and [question]. Please give a score to each frame based on its relevance to the question.

Query: Select the best answer to the following multiple-choice question based on the video and the subtitles…

DeBaised Query: Which decoration is most numerous on the Christmas tree? Choices: Apples, Candles, Berries, Same number.

Temporal segmentation

Clip captioning(VLM)

[debiased query]

Clip relevance scoring(LLM)

[prompt]

Relevance score   0   5   4   1

Scaled softmax

Pruning rate   0.03   0.30   0.25   0.05

Enough sparsity?   yes   Evaluation set