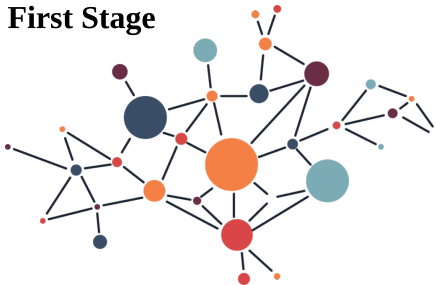
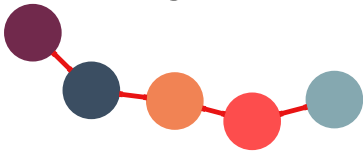


First Stage



Second Stage



We process a randomly
chosen graph path using
graph preprocess function (g)

Graph task

Prompt Question: Q

Prompt:

Instruction:

Below is the detail of a knowledge
graph path. Is node_id connected
with node_id?

Answer the question by reasoning
step-by-step. Choose from the given
options:

1. Yes
2. No

Input:

Node_id has relation_id with
node_id, and node_id has relation_id
with node_id.

**Response: CoT reasoning step +
answer**



Large Language Model