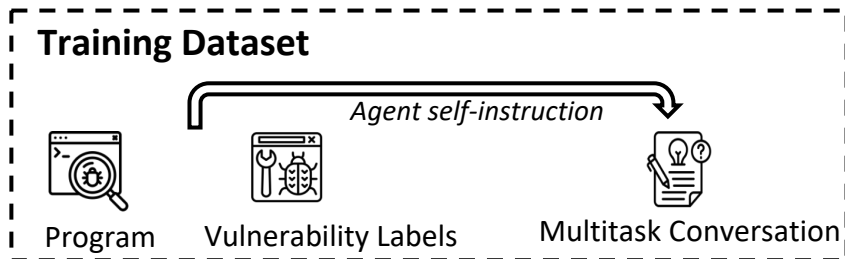


① Student Teacher Dialogue Data Augmentation

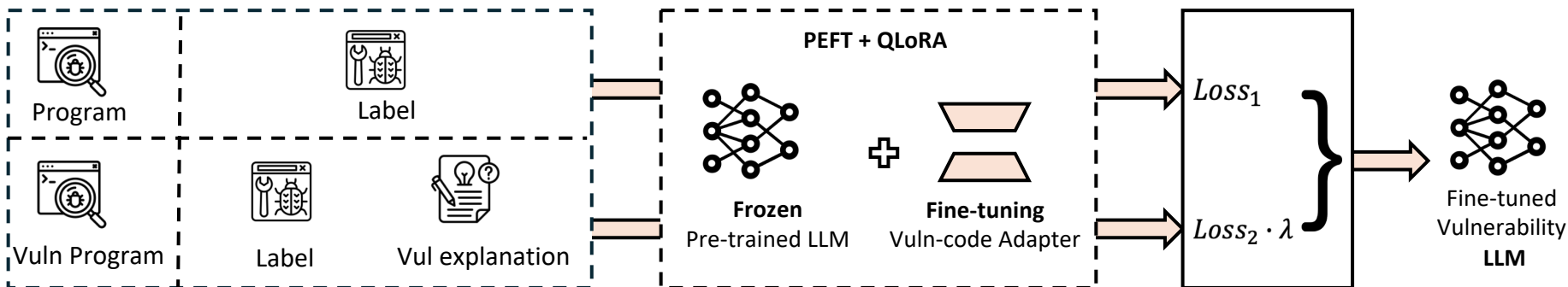


System: You are an expert in detecting and explaining programming security vulnerabilities.

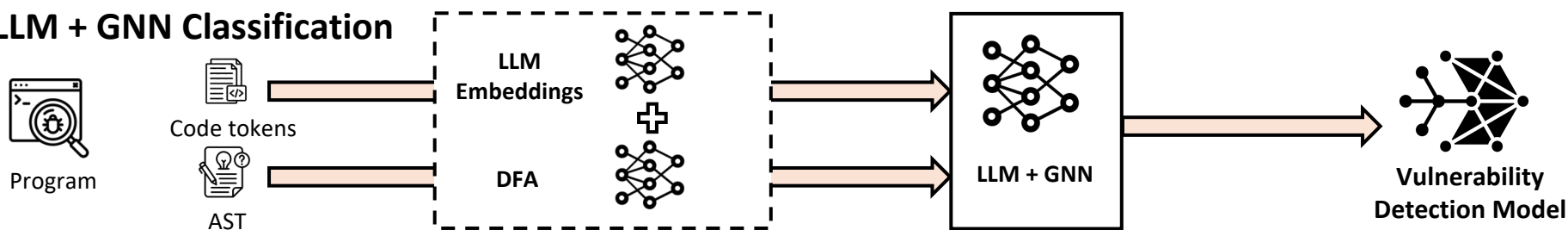
Student: Does the following C code have a security vulnerability: {code}.

Teacher: Yes, in lines {start}-{end}. The vulnerability is type {cwe_type}, complexity {attack_complexity}, severity {severity}, and the following description: {commit_msg}. This is the fixing code: {fixing_code}.

② Multi-Task Self-Instructed Fine-tuning



③ LLM + GNN Classification



④ Detection Inference

