Constraint-Based Narrative Consistency Checking
Kharagpur Data Science Hackathon 2026 – Track A

1. Introduction
This task evaluates whether a hypothetical backstory for a character is globally consistent with a long-form narrative. The problem is treated as a decision task over long contexts rather than a text generation problem.

2. Core Idea
We treat backstories as a set of constraints that restrict what can plausibly occur later in the story. The system checks whether events in the narrative violate these constraints.

3. System Design
The system extracts beliefs, commitments, fears, capabilities, and identity constraints from the backstory. Each constraint is evaluated against the full narrative using deterministic rules. Hard violations immediately invalidate consistency.

4. Long Context Handling
The entire narrative is processed without truncation. Temporal ordering ensures that early noise does not override later causal signals.

5. Decision Logic
Constraints are weighted by normative precedence. Voluntary irreversible actions override all other evidence. If no effective violation exists, the backstory is considered consistent.

6. Limitations
The system relies on keyword-based extraction and does not learn from data. This design prioritizes transparency, robustness, and reproducibility.