🔍 Data Transformation Examples by Direction

Transformation Type	Example
Structured → Structured	SQL → normalized SQL schema, or DB migration
Structured → Semi-Structured	SQL → JSON or XML export
Structured → Unstructured	Table → PDF, text doc
Semi → Structured	JSON logs → SQL via ETL
Semi → Semi	XML → JSON, or NoSQL → NoSQL (e.g., MongoDB → Firestore)
Semi → Unstructured	JSON → raw text, stripping tags
Unstructured → Structured	NLP extracts entities from resume → DB table
Unstructured → Semi	Transcribed video → JSON with timestamps
Unstructured → Unstructured	DOCX → TXT (format conversion)