4. Embedding for Chunked Data

Task: Generate embeddings for text chunks using an LLM or pre-trained model.

Explanation:

Text embeddings transform text chunks into numerical vectors to enable semantic search or other AI tasks.

- **Tools**: Use libraries like HuggingFace for pre-trained models.
- Sample Code Snippet:

python

Copy code

from langchain.embeddings import HuggingFaceEmbeddings

def generate_embeddings(chunks):

model = HuggingFaceEmbeddings(model_name="sentence-transformers/all-MiniLM-L6-v2")

embeddings = [model.embed(chunk) for chunk in chunks]

return embeddings