```
import os
print("DEBUG: GOOGLE_API_KEY =", os.getenv("AlzaSyDrqsCWeZSLqD3M_m-6Ut4
8N8jg9Yrmnws")) # Ensure key is present
import PyPDF2
def get_pdf_text(pdf_docs):
 text = ""
 for pdf in pdf_docs:
   pdf_reader = PyPDF2.PdfReader(pdf)
   for page in pdf_reader.pages:
     page_text = page.extract_text()
     if page_text:
      text += page_text
 return text or "no valid text found in the uploaded pdf."
from PyPDF2 import PdfReader
def get_pdf_text(pdf_files):
 text = ""
 for pdf in pdf_files:
   pdf_reader = PdfReader(pdf)
   for page in pdf_reader.pages:
     text += page.extract_text() + "\n"
 return text
from langchain.text_splitter import RecursiveCharacterTextSplitter
def get_text_chunks(text, chunk_size=1000, overlap=20):
 splitter = RecursiveCharacterTextSplitter(chunk_size=chunk_size, chunk_overlap
=overlap)
 return splitter.split_text(text)
from langchain_community.embeddings import GooglePalmEmbeddings
```

from langchain_community.vectorstores import FAISS

```
def store_embeddings(embeddings):
 print("DEBUG: Embeddings Type:", type(embeddings)) # Should be list
 print("DEBUG: Embeddings Value:", embeddings)
                                                  # Should display embedding
data
 if embeddings is None or len(embeddings) == 0:
   raise ValueError("Embedding generation failed. Check PDF content or API key.")
 dim = len(embeddings[0]) # Safeguard added
 vector_store = FAISS.from_texts(embeddings, dimension=dim)
 return vector_store
def get_vector_store(text_chunks):
def get_text_embeddings(text_chunks):
  embedding_model = GooglePalmEmbeddings(model_name='models/embedding-
001',google_api_key='AlzaSyDrqsCWeZSLqD3M_m-6Ut48N8jg9Yrmnws')
  embeddings = embedding_model.embed_documents(text_chunks)
  embeddings = GooglePalmEmbeddings()
  vector_store = FAISS.from_texts(text_chunks, embeddings)
  return vector_store
  return embeddings
import faiss
import numpy as np
def store_embeddings(embeddings):
 print(embeddings)
 dim = len(embeddings[0]) # DimensionAlzaSyDrqsCWeZSLqD3M_m-6Ut48N8jg9
Yrmnws of embeddings
 index = faiss.IndexFlatL2(dim) # Create FAISS index
 index.add(np.array(embeddings)) # Store embeddings
 return index
from langchain_community.llms import GooglePalm
```

from langchain.chains import ConversationalRetrievalChain

```
from langchain.memory import ConversationBufferMemory
def get_conversational_chain(vector_store):
 Ilm = GooglePalm()
 memory = ConversationBufferMemory(memory_key="chat_history", return_mess
ages=True)
 return ConversationalRetrievalChain(Ilm=Ilm, retriever=vector_store, memory=me
mory)
import streamlit as st
def main():
 st.set_page_config(page_title="DocuQuery: AI-Powered PDF Knowledge Assistan
t")
 st.header("DocuQuery: AI-Powered PDF Assistant")
 uploaded_files = st.sidebar.file_uploader("Upload PDFs", accept_multiple_files=Tr
ue)
 process_button = st.sidebar.button("Process")
 if process_button and uploaded_files:
   with st.spinner("Processing..."):
     text = get_pdf_text(uploaded_files)
     chunks = get_text_chunks(text)
     embeddings = get_vector_store(chunks)
     vector_store = store_embeddings(embeddings)
     conversation_chain = get_conversational_chain(vector_store)
   st.success("Processing complete! Ask questions below.")
   user_question = st.text_input("Ask a question:")
   if user_question:
     response = conversation_chain.run(user_question)
     st.write("Bot:", response)
```

if __name__ == "__main__":

main()