##I have write this code on google colab

```
!pip install langchain
!pip install openai
!pip install PyPDF2
!pip install faiss-cpu

from PyPDF2 import PdfReader
from langchain.embeddings.openai import OpenAIEmbeddings
from langchain.text_splitter import CharacterTextSplitter
from langchain.vectorstores import ElasticVectorSearch, Pinecone,
Weaviate, FAISS

import os
os.environ["OPENAI_AI_KEY"]="sk-Py5T3oCKsbg9lDsMCf8lT3BlbkFJ4bp2x
u7UhZiVEcdUbB0X"

from google.colab import drive
drive.mount('/content/gdrive', force_remount=True)
root_dir="/content/gdrive/My Drive/"

reader =
PdfReader('/content/gdrive/MyDrive/ToxipediaGreenhouseEffectArchive.
pdf')

reader

raw_text=''
for i, page in enumerate(reader.pages):
  text = page.extract_text()
  if text:
    raw_text += text

raw_text
```

```
raw_text[:100]

text_splitter= CharacterTextSplitter(
    separator = "\n",
    chunk_size = 1000,
    chunk_overlap = 200,
    length_function = len,
)
texts = text_splitter.split_text(raw_text)

len(texts)

texts[2]

pip install embeddings

!pip install openai

import openai

embeddings = OpenAIEmbeddings()

docsearch = FAISS.from_texts(texts, embeddings)

from langchain.chains.question_answering import load_qa_chain
from langchain.llms import OpenAI

chain = load_qa_chain(OpenAI(), chain_type="stuff")

## Now we are asking the question ##

query = "what is Green house effect"
docs = docsearch.similarity_search(query)
chain.run(input_documents=docs, question=query)
```

```
query = "What type of gases are responsible for greenhouse effect"
docs = docsearch.similarity_search(query)
chain.run(input_documents=docs, question=query)

query = "How to control the green house effect "
docs = docsearch.similarity_search(query)
chain.run(input_documents=docs, question=query)
```