

##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"]=" Your OPEN AI key write here"
```

```
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)
```