```
In [1]:   #pip install -U ipykernel
```

```
In [2]:   print("OK!")
```

OK!

```
In [3]:   pip install pinecone-client
```

Requirement already satisfied: pinecone-client in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-packages
(3.2.2)
Requirement already satisfied: certifi>=2019.11.17 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-pack
ages (from pinecone-client) (2024.6.2)
Requirement already satisfied: tqdm>=4.64.1 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-packages (f
rom pinecone-client) (4.66.4)
Requirement already satisfied: typing-extensions>=3.7.4 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site
-packages (from pinecone-client) (4.12.2)
Requirement already satisfied: urllib3>=1.26.0 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-packages
(from pinecone-client) (2.2.1)
Note: you may need to restart the kernel to use updated packages.

```
In [4]:   pip install langchain
```

Requirement already satisfied: langchain in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-packages (0.2.
5)
Requirement already satisfied: PyYAML>=5.3 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-packages (fr
om langchain) (6.0.1)
Requirement already satisfied: SQLAlchemy<3,>=1.4 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-packa
ges (from langchain) (2.0.30)
Requirement already satisfied: aiohttp<4.0.0,>=3.8.3 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-pa
ckages (from langchain) (3.9.5)
Requirement already satisfied: async-timeout<5.0.0,>=4.0.0 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/s
ite-packages (from langchain) (4.0.3)
Requirement already satisfied: langchain-core<0.3.0,>=0.2.7 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/
site-packages (from langchain) (0.2.7)
Requirement already satisfied: langchain-text-splitters<0.3.0,>=0.2.0 in /Users/rashmi/anaconda3/envs/mchatbot/lib/
python3.8/site-packages (from langchain) (0.2.1)
Requirement already satisfied: langsmith<0.2.0,>=0.1.17 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site
-packages (from langchain) (0.1.77)
Requirement already satisfied: numpy<2,>=1 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-packages (fr
om langchain) (1.24.4)
Requirement already satisfied: pydantic<3,>=1 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-packages
(from langchain) (1.10.16)
Requirement already satisfied: requests<3,>=2 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-packages
(from langchain) (2.32.3)
Requirement already satisfied: tenacity<9.0.0,>=8.1.0 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-p
ackages (from langchain) (8.3.0)
Requirement already satisfied: aiosignal>=1.1.2 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-package
s (from aiohttp<4.0.0,>=3.8.3->langchain) (1.3.1)
Requirement already satisfied: attrs>=17.3.0 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-packages
(from aiohttp<4.0.0,>=3.8.3->langchain) (23.2.0)
Requirement already satisfied: frozenlist>=1.1.1 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-packag
es (from aiohttp<4.0.0,>=3.8.3->langchain) (1.4.1)
Requirement already satisfied: multidict<7.0,>=4.5 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-pack
ages (from aiohttp<4.0.0,>=3.8.3->langchain) (6.0.5)
Requirement already satisfied: yarl<2.0,>=1.0 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-packages
(from aiohttp<4.0.0,>=3.8.3->langchain) (1.9.4)
Requirement already satisfied: jsonpatch<2.0,>=1.33 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-pac
kages (from langchain-core<0.3.0,>=0.2.7->langchain) (1.33)
Requirement already satisfied: packaging<25,>=23.2 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-pack
```

```
ages (from langchain-core<0.3.0,>=0.2.7->langchain) (24.1)
Requirement already satisfied: orjson<4.0.0,>=3.9.14 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-pa
ckages (from langsmith<0.2.0,>=0.1.17->langchain) (3.10.5)
Requirement already satisfied: typing-extensions>=4.2.0 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site
-packages (from pydantic<3,>=1->langchain) (4.12.2)
Requirement already satisfied: charset-normalizer<4,>=2 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site
-packages (from requests<3,>=2->langchain) (3.3.2)
Requirement already satisfied: idna<4,>=2.5 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-packages (f
rom requests<3,>=2->langchain) (3.7)
Requirement already satisfied: urllib3<3,>=1.21.1 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-packa
ges (from requests<3,>=2->langchain) (2.2.1)
Requirement already satisfied: certifi>=2017.4.17 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-packa
ges (from requests<3,>=2->langchain) (2024.6.2)
Requirement already satisfied: greenlet!=0.4.17 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-package
s (from SQLAlchemy<3,>=1.4->langchain) (3.0.3)
Requirement already satisfied: jsonpointer>=1.9 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-package
s (from jsonpatch<2.0,>=1.33->langchain-core<0.3.0,>=0.2.7->langchain) (3.0.0)
Note: you may need to restart the kernel to use updated packages.
```

In [5]:
```
pip install -U langchain-community
```

```
Requirement already satisfied: langchain-community in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-pack
ages (0.2.5)
Requirement already satisfied: PyYAML>=5.3 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-packages (fr
om langchain-community) (6.0.1)
Requirement already satisfied: SQLAlchemy<3,>=1.4 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-packa
ges (from langchain-community) (2.0.30)
Requirement already satisfied: aiohttp<4.0.0,>=3.8.3 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-pa
ckages (from langchain-community) (3.9.5)
Requirement already satisfied: dataclasses-json<0.7,>=0.5.7 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/
site-packages (from langchain-community) (0.5.14)
Requirement already satisfied: langchain<0.3.0,>=0.2.5 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-
packages (from langchain-community) (0.2.5)
Requirement already satisfied: langchain-core<0.3.0,>=0.2.7 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/
site-packages (from langchain-community) (0.2.7)
Requirement already satisfied: langsmith<0.2.0,>=0.1.0 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-
packages (from langchain-community) (0.1.77)
Requirement already satisfied: numpy<2,>=1 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-packages (fr
om langchain-community) (1.24.4)
Requirement already satisfied: requests<3,>=2 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-packages
(from langchain-community) (2.32.3)
Requirement already satisfied: tenacity<9.0.0,>=8.1.0 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-p
ackages (from langchain-community) (8.3.0)
Requirement already satisfied: aiosignal>=1.1.2 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-package
s (from aiohttp<4.0.0,>=3.8.3->langchain-community) (1.3.1)
Requirement already satisfied: attrs>=17.3.0 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-packages
(from aiohttp<4.0.0,>=3.8.3->langchain-community) (23.2.0)
Requirement already satisfied: frozenlist>=1.1.1 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-packag
es (from aiohttp<4.0.0,>=3.8.3->langchain-community) (1.4.1)
Requirement already satisfied: multidict<7.0,>=4.5 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-pack
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Requirement already satisfied: yarl<2.0,>=1.0 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-packages
(from aiohttp<4.0.0,>=3.8.3->langchain-community) (1.9.4)
Requirement already satisfied: async-timeout<5.0,>=4.0 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-
packages (from aiohttp<4.0.0,>=3.8.3->langchain-community) (4.0.3)
Requirement already satisfied: marshmallow<4.0.0,>=3.18.0 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/si
te-packages (from dataclasses-json<0.7,>=0.5.7->langchain-community) (3.21.3)
Requirement already satisfied: typing-inspect<1,>=0.4.0 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site
-packages (from dataclasses-json<0.7,>=0.5.7->langchain-community) (0.9.0)
Requirement already satisfied: langchain-text-splitters<0.3.0,>=0.2.0 in /Users/rashmi/anaconda3/envs/mchatbot/lib/
python3.8/site-packages (from langchain<0.3.0,>=0.2.5->langchain-community) (0.2.1)
Requirement already satisfied: pydantic<3,>=1 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-packages
(from langchain<0.3.0,>=0.2.5->langchain-community) (1.10.16)
Requirement already satisfied: jsonpatch<2.0,>=1.33 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-pac
```

```
kages (from langchain-core<0.3.0,>=0.2.7->langchain-community) (1.33)
Requirement already satisfied: packaging<25,>=23.2 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-pack
ages (from langchain-core<0.3.0,>=0.2.7->langchain-community) (24.1)
Requirement already satisfied: orjson<4.0.0,>=3.9.14 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-pa
ckages (from langsmith<0.2.0,>=0.1.0->langchain-community) (3.10.5)
Requirement already satisfied: charset-normalizer<4,>=2 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site
-packages (from requests<3,>=2->langchain-community) (3.3.2)
Requirement already satisfied: idna<4,>=2.5 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-packages (f
rom requests<3,>=2->langchain-community) (3.7)
Requirement already satisfied: urllib3<3,>=1.21.1 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-packa
ges (from requests<3,>=2->langchain-community) (2.2.1)
Requirement already satisfied: certifi>=2017.4.17 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-packa
ges (from requests<3,>=2->langchain-community) (2024.6.2)
Requirement already satisfied: typing-extensions>=4.6.0 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site
-packages (from SQLAlchemy<3,>=1.4->langchain-community) (4.12.2)
Requirement already satisfied: greenlet!=0.4.17 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-package
s (from SQLAlchemy<3,>=1.4->langchain-community) (3.0.3)
Requirement already satisfied: jsonpointer>=1.9 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-package
s (from jsonpatch<2.0,>=1.33->langchain-core<0.3.0,>=0.2.7->langchain-community) (3.0.0)
Requirement already satisfied: mypy-extensions>=0.3.0 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-p
ackages (from typing-inspect<1,>=0.4.0->dataclasses-json<0.7,>=0.5.7->langchain-community) (1.0.0)
Note: you may need to restart the kernel to use updated packages.
```

In [6]:
```python
from langchain import PromptTemplate
from langchain.chains import RetrievalQA
from langchain.embeddings import HuggingFaceEmbeddings
from langchain.vectorstores import Pinecone
import pinecone
from langchain.document_loaders import PyPDFLoader, DirectoryLoader
from langchain.text_splitter import RecursiveCharacterTextSplitter
from langchain.prompts import PromptTemplate
from langchain.llms import CTransformers
```

```
/Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-packages/pinecone/data/index.py:1: TqdmWarning: IProgress
not found. Please update jupyter and ipywidgets. See https://ipywidgets.readthedocs.io/en/stable/user_install.html
  from tqdm.autonotebook import tqdm
```

In [7]:
```python
PINECONE_API_KEY = "2a646a8b-58b8-4e28-84c9-ca66ff586687"
PINECONE_API_ENV = "Serverless"
```

In [8]:
```python
#Extract data from the PDF
def load_pdf(data):
    loader = DirectoryLoader(data,
                    glob="*.pdf",
                    loader_cls=PyPDFLoader)

    documents = loader.load()

    return documents
```

In [9]:
```python
extracted_data = load_pdf("/Users/rashmi/Desktop/End-to-end-Medical-Chatbot-using-Llama2/data")
```

In [10]:
```python
# extracted_data
```

In [11]:
```python
#Create text chunks
def text_split(extracted_data):
    text_splitter = RecursiveCharacterTextSplitter(chunk_size = 500, chunk_overlap = 20)
    text_chunks = text_splitter.split_documents(extracted_data)
```

```python
        return text_chunks
```

In [12]:
```python
text_chunks = text_split(extracted_data)
print("length of my chunk:", len(text_chunks))
```

length of my chunk: 7020

In [13]:
```python
# text_chunks
```

In [14]:
```python
#download embedding model
def download_hugging_face_embeddings():
    embeddings = HuggingFaceEmbeddings(model_name="sentence-transformers/all-MiniLM-L6-v2")
    return embeddings
```

In [15]:
```python
embeddings = download_hugging_face_embeddings()
```

/Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-packages/langchain_core/_api/deprecation.py:139: LangChain
DeprecationWarning: The class `HuggingFaceEmbeddings` was deprecated in LangChain 0.2.2 and will be removed in 0.3.
0. An updated version of the class exists in the langchain-huggingface package and should be used instead. To use i
t run `pip install -U langchain-huggingface` and import as `from langchain_huggingface import HuggingFaceEmbeddings
`.
  warn_deprecated(

In [16]:
```python
embeddings
```

Out[16]: HuggingFaceEmbeddings(client=SentenceTransformer(
    (0): Transformer({'max_seq_length': 256, 'do_lower_case': False}) with Transformer model: BertModel
    (1): Pooling({'word_embedding_dimension': 384, 'pooling_mode_cls_token': False, 'pooling_mode_mean_tokens': Tru
e, 'pooling_mode_max_tokens': False, 'pooling_mode_mean_sqrt_len_tokens': False})
    (2): Normalize()
), model_name='sentence-transformers/all-MiniLM-L6-v2', cache_folder=None, model_kwargs={}, encode_kwargs={}, mult
i_process=False, show_progress=False)

In [17]:
```python
query_result = embeddings.embed_query("Hello world")
print("Length", len(query_result))
```

Length 384

In [18]:
```python
# query_result
```

In [19]:
```python
import os
import pinecone
# Set the environment variables for Pinecone API key and environment
os.environ['PINECONE_API_KEY'] = "2a646a8b-58b8-4e28-84c9-ca66ff586687"
os.environ['PINECONE_ENV'] = "Serverless"
```

In [20]:
```python
pinecone_client=pinecone.Pinecone(api_key=PINECONE_API_KEY,environment=PINECONE_API_ENV)
```

In [26]:
```python
#from pinecone import Pinecone
#from transformers import AutoTokenizer, AutoModel
#import torch
```

```
In [54]:    #pip install --upgrade langchain-pinecone
```

huggingface/tokenizers: The current process just got forked, after parallelism has already been used. Disabling par
allelism to avoid deadlocks...
To disable this warning, you can either:
        - Avoid using `tokenizers` before the fork if possible
        - Explicitly set the environment variable TOKENIZERS_PARALLELISM=(true | false)
Requirement already satisfied: langchain-pinecone in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-packa
ges (0.1.1)
WARNING: Retrying (Retry(total=4, connect=None, read=None, redirect=None, status=None)) after connection broken by
'ReadTimeoutError("HTTPSConnectionPool(host='pypi.org', port=443): Read timed out. (read timeout=15)")': /simple/la
ngchain-pinecone/
WARNING: Retrying (Retry(total=3, connect=None, read=None, redirect=None, status=None)) after connection broken by
'ConnectTimeoutError(<pip._vendor.urllib3.connection.HTTPSConnection object at 0x7ff2265c7fd0>, 'Connection to pyp
i.org timed out. (connect timeout=15)')': /simple/langchain-pinecone/
WARNING: Retrying (Retry(total=2, connect=None, read=None, redirect=None, status=None)) after connection broken by
'NewConnectionError('<pip._vendor.urllib3.connection.HTTPSConnection object at 0x7ff2265fb250>: Failed to establish
a new connection: [Errno 8] nodename nor servname provided, or not known')': /simple/langchain-pinecone/
WARNING: Retrying (Retry(total=1, connect=None, read=None, redirect=None, status=None)) after connection broken by
'NewConnectionError('<pip._vendor.urllib3.connection.HTTPSConnection object at 0x7ff2265fb400>: Failed to establish
a new connection: [Errno 8] nodename nor servname provided, or not known')': /simple/langchain-pinecone/
WARNING: Retrying (Retry(total=0, connect=None, read=None, redirect=None, status=None)) after connection broken by
'NewConnectionError('<pip._vendor.urllib3.connection.HTTPSConnection object at 0x7ff2265fb5b0>: Failed to establish
a new connection: [Errno 8] nodename nor servname provided, or not known')': /simple/langchain-pinecone/
Requirement already satisfied: langchain-core<0.3,>=0.1.52 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/s
ite-packages (from langchain-pinecone) (0.2.7)
Requirement already satisfied: numpy<2,>=1 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-packages (fr
om langchain-pinecone) (1.24.4)
Requirement already satisfied: pinecone-client<4.0.0,>=3.2.2 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.
8/site-packages (from langchain-pinecone) (3.2.2)
Requirement already satisfied: PyYAML>=5.3 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-packages (fr
om langchain-core<0.3,>=0.1.52->langchain-pinecone) (6.0.1)
Requirement already satisfied: jsonpatch<2.0,>=1.33 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-pac
kages (from langchain-core<0.3,>=0.1.52->langchain-pinecone) (1.33)
Requirement already satisfied: langsmith<0.2.0,>=0.1.75 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site
-packages (from langchain-core<0.3,>=0.1.52->langchain-pinecone) (0.1.77)
Requirement already satisfied: packaging<25,>=23.2 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-pack
ages (from langchain-core<0.3,>=0.1.52->langchain-pinecone) (24.1)
Requirement already satisfied: pydantic<3,>=1 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-packages
(from langchain-core<0.3,>=0.1.52->langchain-pinecone) (1.10.16)
Requirement already satisfied: tenacity<9.0.0,>=8.1.0 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-p
ackages (from langchain-core<0.3,>=0.1.52->langchain-pinecone) (8.3.0)
Requirement already satisfied: certifi>=2019.11.17 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-pack
ages (from pinecone-client<4.0.0,>=3.2.2->langchain-pinecone) (2024.6.2)
Requirement already satisfied: tqdm>=4.64.1 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-packages (f
rom pinecone-client<4.0.0,>=3.2.2->langchain-pinecone) (4.66.4)
Requirement already satisfied: typing-extensions>=3.7.4 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site
-packages (from pinecone-client<4.0.0,>=3.2.2->langchain-pinecone) (4.12.2)
Requirement already satisfied: urllib3>=1.26.0 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-packages
(from pinecone-client<4.0.0,>=3.2.2->langchain-pinecone) (2.2.1)
Requirement already satisfied: jsonpointer>=1.9 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-package
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Requirement already satisfied: orjson<4.0.0,>=3.9.14 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-pa
ckages (from langsmith<0.2.0,>=0.1.75->langchain-core<0.3,>=0.1.52->langchain-pinecone) (3.10.5)
Requirement already satisfied: requests<3,>=2 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-packages
(from langsmith<0.2.0,>=0.1.75->langchain-core<0.3,>=0.1.52->langchain-pinecone) (2.32.3)
Requirement already satisfied: charset-normalizer<4,>=2 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site
-packages (from requests<3,>=2->langsmith<0.2.0,>=0.1.75->langchain-core<0.3,>=0.1.52->langchain-pinecone) (3.3.2)
Requirement already satisfied: idna<4,>=2.5 in /Users/rashmi/anaconda3/envs/mchatbot/lib/python3.8/site-packages (f
rom requests<3,>=2->langsmith<0.2.0,>=0.1.75->langchain-core<0.3,>=0.1.52->langchain-pinecone) (3.7)
Note: you may need to restart the kernel to use updated packages.

```
In [22]:    index_name = "mchatbot"
```

```python
index_name = "mchatbot"
docsearch=Pinecone.from_texts([t.page_content for t in text_chunks], embeddings, index_name=index_name)
```

In [32]:
```python
# initialize Pinecone index directly

#docsearch = pinecone.Index(index_name).upsert([(t.page_content, embeddings.embed_text(t.page_content)) for t in t
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
Cell In[32], line 3
      1 # Create the index name and initialize Pinecone index directly
      2 index_name = "mchatbot"
----> 3 docsearch = pinecone.Index(index_name).upsert([(t.page_content, embeddings.embed_text(t.page_content)) for
t in text_chunks])

TypeError: __init__() missing 1 required positional argument: 'host'
```

In [23]:
```python
#If we already have an index we can load it like this
docsearch=Pinecone.from_existing_index(index_name, embeddings)

query = "What are Allergies"

docs=docsearch.similarity_search(query, k=3)

print("Result", docs)
```

```
Result [Document(page_content="GALE ENCYCLOPEDIA OF MEDICINE 2 117Allergies\nAllergic rhinitis is commonly triggere
d by\nexposure to household dust, animal fur,or pollen. The foreign substance thattriggers an allergic reaction is
calledan allergen.\nThe presence of an allergen causes the\nbody's lymphocytes to begin producingIgE antibodies. Th
e lymphocytes of an allergy sufferer produce an unusuallylarge amount of IgE.\nIgE molecules attach to mast\ncells,
which contain histamine.HistaminePollen grains\nLymphocyte\nFIRST EXPOSURE"), Document(page_content='allergens are
the following:\n• plant pollens\n• animal fur and dander\n• body parts from house mites (microscopic creatures\nfou
nd in all houses)\n• house dust• mold spores• cigarette smoke• solvents• cleaners\nCommon food allergens include th
e following:\n• nuts, especially peanuts, walnuts, and brazil nuts\n• fish, mollusks, and shellfish• eggs• wheat• m
ilk• food additives and preservatives\nThe following types of drugs commonly cause aller-\ngic reactions:\n• penici
llin or other antibiotics'), Document(page_content='itchy, scratchy nose, eyes, and throat common in aller-gic rhin
itis.\nThe number of possible airborne allergens is enor-')]
```

In [24]:
```python
prompt_template="""
Use the following pieces of information to answer the user's question.
If you don't know the answer, just say that you don't know, don't try to make up an answer.

Context: {context}
Question: {question}

Only return the helpful answer below and nothing else.
Helpful answer:
"""
```

In [25]:
```python
PROMPT=PromptTemplate(template=prompt_template, input_variables=["context", "question"])
chain_type_kwargs={"prompt": PROMPT}
```

In [28]:
```python
llm=CTransformers(model="/Users/rashmi/Desktop/End-to-end-Medical-Chatbot-using-Llama2/model/llama-2-7b-chat.ggmlv
                  model_type="llama",
                  config={'max_new_tokens':512,
                          'temperature':0.8})
```

```
In [29]:  qa=RetrievalQA.from_chain_type(
              llm=llm,
              chain_type="stuff",
              retriever=docsearch.as_retriever(search_kwargs={'k': 2}),
              return_source_documents=True,
              chain_type_kwargs=chain_type_kwargs)
```

```
In [ ]:  while True:
              user_input=input(f"Input Prompt:")
              result=qa({"query": user_input})
              print("Response : ", result["result"])
```

Response : It is possible that undulant fever can be exhausting because it can cause symptoms such as high fever, shivering, drenching sweats, headache, poor appetite, backache, weakness, and depression. In rare cases, the disease can become severe enough to require immediate medical attention, including a visit to an emergency room or hospitalization.