

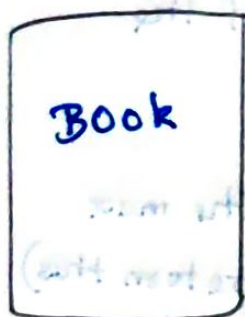
6 Vector Database - Eg of cosine Similarity

BOW
TF-IDF
word2Vec

To convert
text to
vectors

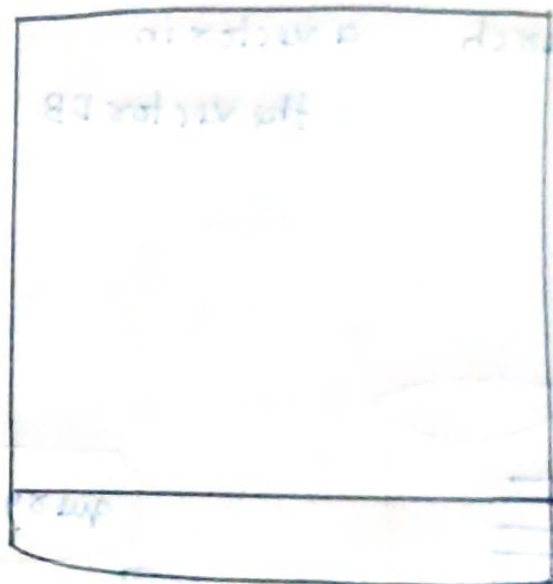
↳ Gen AI LLMs
models

[RAG System]



Say you have a
book based
on physics

← we can put
① videos
② pdf
(whatever we
want here)



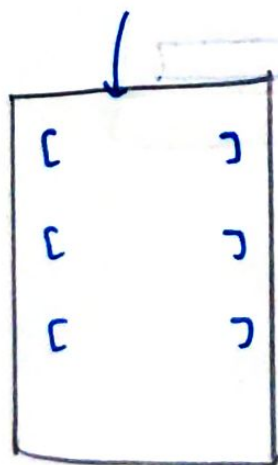
(you want to build
a chat bot for
your project)

(Say you ask a question
on what is physics

↓
it should retrieve the
contents from the
book and answer it)

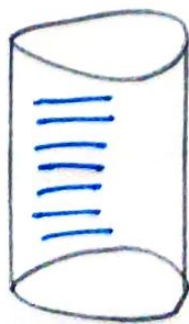
(The query will be
converted to a
vector)

using the same
vector embedding
Tech



(All of them
will be converted
to vectors)

Stored in a Vector
Database



we take this
vector and we
query the DB

Internally
inside there will
be a cosine similarity
search
(that happens)

Vector

The query which was converted to a vector
gets compared with all the vectors in the

vector DB

↓
Cosine
Similarity

Search

[-----]

a vector in
the vector DB

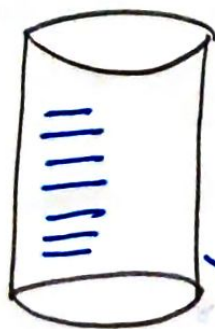
[-----]

query
vector

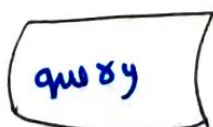
Suppose say one of the

match is **90%**

↓
this is the max
(it will return this)



The one which
matches our query
is returned



gets
converted
to text
(displayed)

