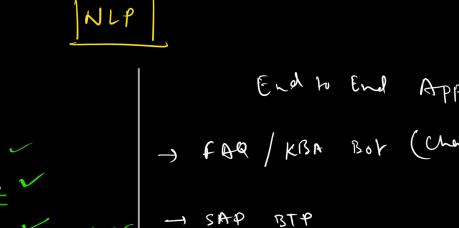
- Gen AJ Business

Specialized Tools and Systems Core AI/ML Concepts 1.Langchain Fundamentals · Introduction to LangSmith and LangServe. 1. AI/ML Basics · Use case: Automate a Understand regression, customer service process using classification, and prediction Langchain. models. · Hands-on: Implement basic 2. Vector Databases and machine learning models 1.NLP Concepts and Deep using scikit-learn. **Semantic Search** . Python Basics Learning Learn about embeddings. • NLP, Encoding, Bag of words, 2. Version Control with Git cosine similarity, and indexing. structures, functions, and TFIDF, Word2vec Basics of Git: Commits, · ChromaDB, FAISS, pgvector, basic libraries (NumPy, · Learn tokenization, text HANA Vector Engine branches, merges, and Pandas). embeddings, and fundamental Exercise: Build a semantic workflows. Exercises and projects: deep learning models. search engine for product · Collaboration: Working on Small scripts to · Project: Develop a sentiment descriptions. group projects using GitHub manipulate data and analysis tool. or Hugging Face Space perform simple 3.Local LLM (Llama3, calculations. 2.GenAl Fundamentals and Introduction to Streamlit
 Building interactive data Mistral) **Transformer Architectures** · Deploying local language 2. SQL Basics · Detailed study of transformer applications. models and understanding Understanding of SQL Project: Create a dashboard models and their applications proprietary indices. syntax, queries, joins, for an ML model. in GenAl. Hands-on: Set up and query a and database design. · Starting the Journey Towards local LLM. · Practice: Build and guery Generative AI (GPT4, Mistral a small database. PHASE 7B, LLAMA, Hugging Face Open Source LLM **Foundation Skills** Models,Google Palm Model) Practical: Implement a simple chatbot using transformers.



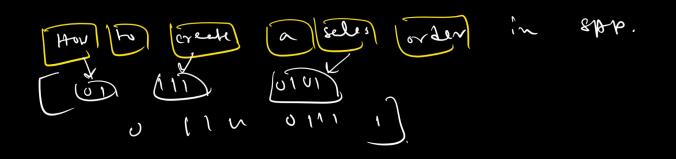
SAP

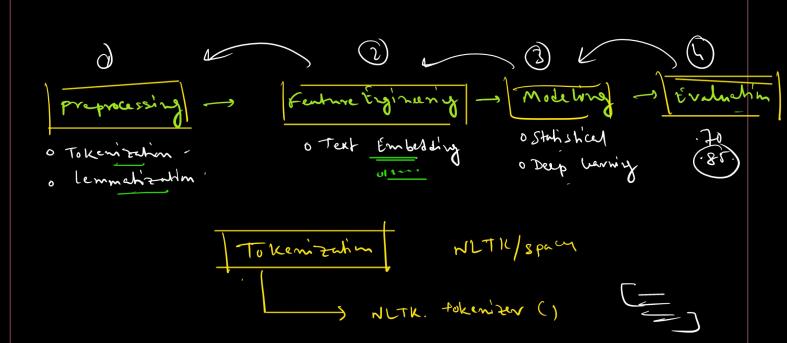
Cosign Sm

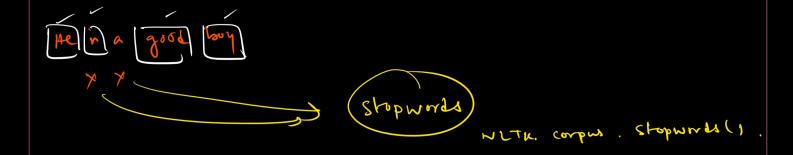
sales orler customer Involu in SAP generale a purchase or der. process Z

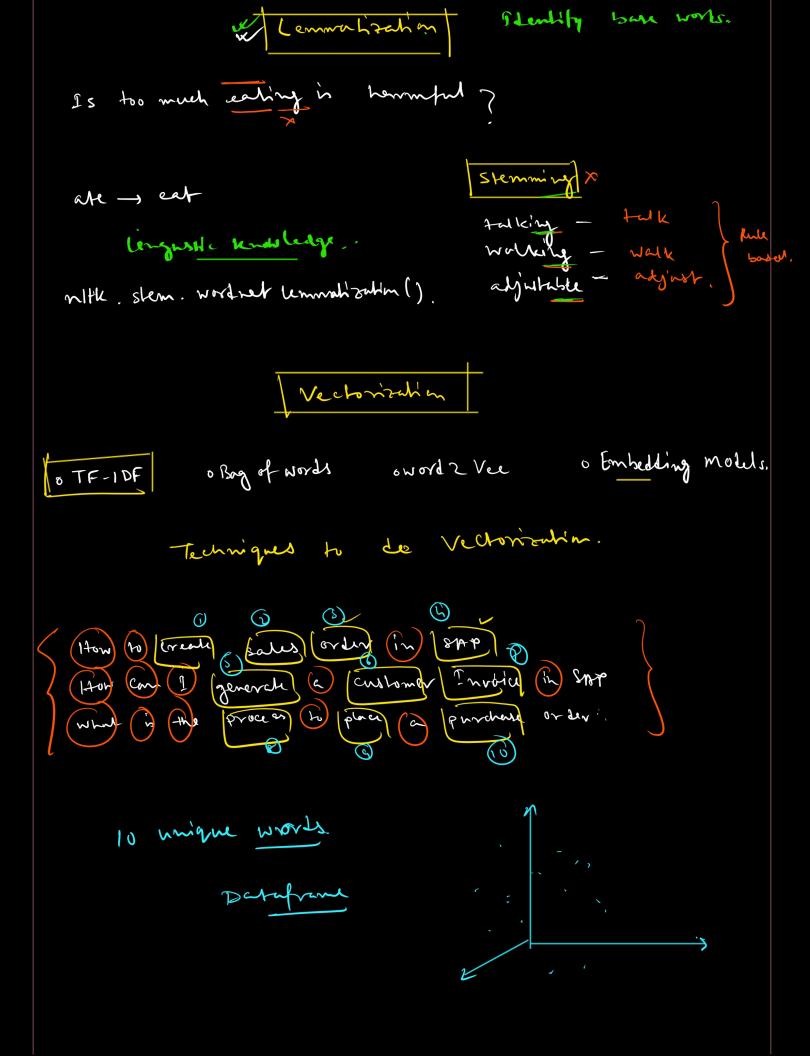
chat expr. 01 11 101 1.

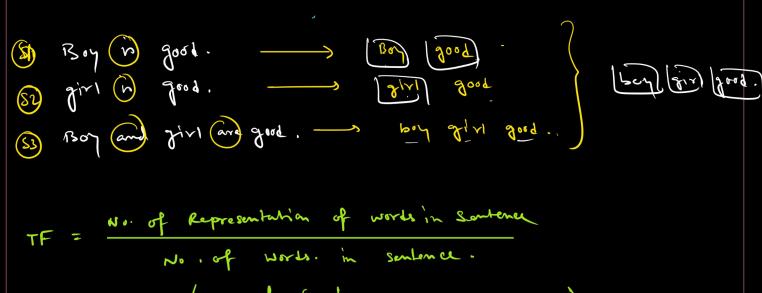
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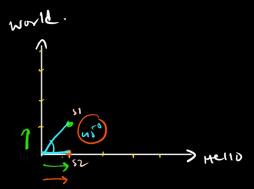
Final TF- IPF

	2009	buy	2/11
(12)	O	1/2 log (3/2)	0
(52)	0	O	1/2 log (3/2)
(5.3)	6	1/3 log (3/2)	1/3 hy (3/2).
_			'

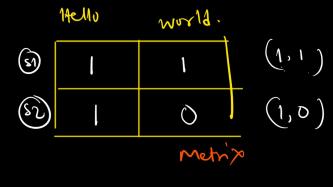
Q - How is the boy - 01111011

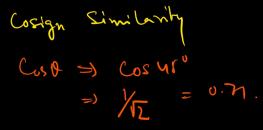
Co-Sign Similarity

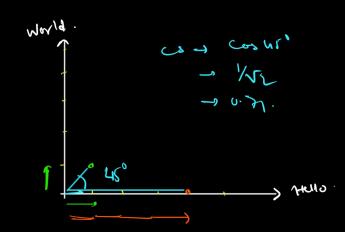
- (SI) Hello world.
- (S2) 14ello.



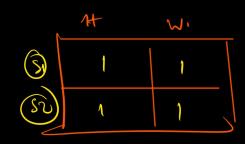
- (S) Hello world.
- (52) Hello Hello Hello.



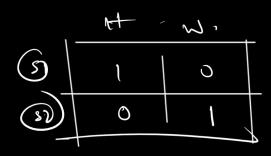


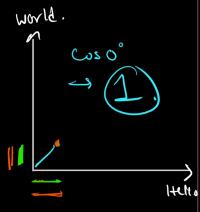


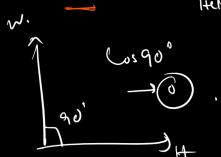
- (2) Hello world
- (S) Hello world.



- (SI) Hello
- (1) mary q .







Cosign Similarity math

$$CS = \frac{\sum_{i=1}^{n} A_{i}^{i} \times \sqrt{\sum_{i=1}^{n} B_{i}^{i}}}{\sqrt{\sum_{i=1}^{n} A_{i}^{i}} \times \sqrt{\sum_{i=1}^{n} B_{i}^{i}}}$$

m = no. of work.

$$\frac{(1\times1)}{\sqrt{1^2+1^2}} + \frac{(1\times0)}{\sqrt{1^2+0^2}} = \frac{1}{\sqrt{12}}$$



y unique works.

creal Sales order

phychase	creek	Salls	over	phycheste	•
(4)	1	1	1	0	A
(52)	ĵ	٥	1	1	B
		1	-	1	<u> </u>

$$\frac{(1\times1) + (1\times0) + (0\times1) + (1\times1)}{\sqrt{1\times1} + \sqrt{1\times1} + \sqrt{1\times1} + \sqrt{1\times1}}$$

$$= \frac{2}{2.99} = 0.66.$$