



SUPERIOR UNIVERSITY

NAME :Muhammad ilyas

Roll number:033

Section:BSAI(4A)

SUBJECT:PAI(Lab)

SUBMITTED TO :Mr Rasikh Ali

1. LangChain

LangChain is a tool that helps connect big language models with other tools and data. It makes it easier to build apps like smart chatbots or question-answer systems.

2. RAG (Retrieval-Augmented Generation)

RAG is a smart method where the AI finds useful information from documents first, then uses that info to give better and more accurate answers.

3. LLMs (Large Language Models)

LLMs are powerful AIs trained on huge amounts of text. They can read, understand, and write text like a human. Examples include ChatGPT and BERT.

4. FAISS

FAISS is a tool made by Facebook to help find similar items quickly. It is used to compare data and find things that are close in meaning, like similar documents.

5. Vector

A vector is just a list of numbers that shows what something means. In AI, we turn words or documents into vectors so the computer can understand and compare them.

6. VectorDB (Vector Database)

A VectorDB stores vectors and helps search through them fast. It's used in smart systems to find similar words, sentences, or images.

7. Generative AI

Generative AI is a type of AI that can create new things like text, images, music, or code. It learns from data and then makes something new that looks like it was made by a human.

8. GANs (Generative Adversarial Networks)

GANs are a special kind of AI made of two parts. One part makes fake data (like pictures), and the other checks if it's real or fake. Together, they improve and create very realistic results.