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Task: 11 Submitted to: Sir. Rasikh Ali

Subject: Programming for Ai

1. **LangChain**: It's a tool that helps you build apps using large language models by connecting different steps like prompts, memory, and external tools in a smooth way.

- 2. **RAG (Retrieval-Augmented Generation)**: This method helps a language model give better answers by first finding useful information from a database or documents, then using that info to respond.
- 3. **LLMs (Large Language Models)**: These are advanced AI models trained on lots of text so they can understand and generate human-like language for example, writing essays or answering questions.
- 4. **FAISS**: A library made by Facebook that helps quickly search through large collections of data points (vectors) to find what's most similar.
- 5. **Vector**: It's like a list of numbers that represents data such as a word, image, or sentence so that a computer can work with it in math-based ways.
- 6. **Vector DB (Vector Database)**: A type of database that's designed specifically to store and search these number-based representations (vectors), often used with AI.
- 7. **Generative AI**: A kind of AI that can make new stuff on its own like writing, drawing, or even making music based on what it has learned.
- 8. **GANs** (**Generative Adversarial Networks**): A special kind of AI where two models compete: one tries to create fake data (like images), and the other tries to detect if it's fake, helping improve the quality over time.