**Chat Bot That Can Interact with the SQL Database and PDF Document**

**Input Data**

In the input data, we have:

* SQL database
* PDF data

**Toolkits Used for This Project**

1. **SQL Database Toolkit**:
   * This helps us to interact with the relational database in an iterative fashion, i.e., it can recover from errors.
2. **Retriever Tools**:
   * This is our custom tool that can interact with the PDF data. It extracts text from the PDF, converts it into chunks using a recursive character text splitter, and finally, using embedding techniques, saves that embedding on a FAISS vector database.
   * I created retriever tools to retrieve it and used the prompt in it with the help of the document\_prompt hyperparameter present in the create\_retrieve\_tool.

**Combining the Tools**

Finally, we combine the tools which include the SQL database toolkit and our retriever tool.

**Using the React Agent**

* With the help of the create\_react\_agent, we give our LLM model combined tools and system messages. (System messages are the prompts used by the agent to interact with the database.)

**Creating the Function**

* Finally, we create a function named get\_response which takes a question and provides us with the result based on the SQL database and the PDF data.