MIDTERM Question 2 (Part 1)

**Date: 9th September, 2024**

1. What is Framework? Explain with real life example
2. Which architecture Django Follows? Explain with Diagram
3. Explain different Types of Attribute along with their symbol in ERD
4. You’re working for a small online bookstore, "eShikhon Book," and have been tasked with setting up a database to manage book inventory, authors, and customer orders. You need to design the database schema and implement CRUD operations to handle the basic functionalities required for this bookstore.
   1. Write the SQL command to create a database named book\_eShikhon
   2. Write the SQL command to create a table named books with the following fields:
      1. book\_id (INTEGER, Primary Key, Auto Increment)
      2. title (VARCHAR(255))
      3. author\_id (INTEGER)
      4. price (DECIMAL(10,2))
      5. publication\_date
   3. Write the SQL command to create a table named authors with the following fields:
      1. author\_id (INTEGER, Primary Key, Auto Increment)
      2. name (VARCHAR(255))
      3. birthdate (DATE)
   4. Write the SQL command to create a table named orders with the following fields:
      1. order\_id (INTEGER, Primary Key, Auto Increment)
      2. customer\_name (VARCHAR(255))
      3. book\_id (INTEGER)
      4. order\_date (DATE)
      5. quantity (INTEGER)
   5. Write the SQL command to insert a new book into the books table with the following details:
      1. Title: "The Great Gatsby"
      2. Author ID: 1
      3. Price: 10.99
      4. Publication Date: 1925-04-10
   6. Write the SQL command to insert a new author into the authors table with the following details:
      1. Name: "F. Scott Fitzgerald"
      2. Birthdate: 1896-09-24
   7. Write the SQL command to retrieve all books from the books table.
   8. Write the SQL command to retrieve all orders for a specific book with book\_id 1.
   9. Write the SQL command to update the price of the book with book\_id 1 to 12.99.
   10. Write the SQL command to delete the book with book\_id 1.