

## MIDTERM Question 2 (Part 1)

**Date: 9<sup>th</sup> 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.
  - a. Write the SQL command to create a database named `book_company`
  - b. Write the SQL command to create a table named `books` with the following fields:
    - i. `book_id` (INTEGER, Primary Key, Auto Increment)
    - ii. `title` (VARCHAR(255))
    - iii. `author_id` (INTEGER)
    - iv. `price` (INTEGER)
    - v. `publication_date` (VARCHAR(255))
  - c. Write the SQL command to create a table named `authors` with the following fields:
    - i. `author_id` (INTEGER, Primary Key, Auto Increment)
    - ii. `name` (VARCHAR(255))
    - iii. `birthdate` (DATE)
  - d. Write the SQL command to create a table named `orders` with the following fields:
    - i. `order_id` (INTEGER, Primary Key, Auto Increment)
    - ii. `customer_name` (VARCHAR(255))
    - iii. `book_id` (INTEGER)
    - iv. `order_date` (DATE)
    - v. `quantity` (INTEGER)
  - e. Write the SQL command to insert a new book into the `books` table with the following details:
    - i. Title: "The Great Gatsby"
    - ii. Author ID: 1
    - iii. Price: 10
    - iv. Publication Date: 1925-04-10
  - f. Write the SQL command to insert a new author into the `authors` table with the following details:
    - i. Name: "F. Scott Fitzgerald"
    - ii. Birthdate: 1896-09-24
  - g. Write the SQL command to retrieve all books from the `books` table.
  - h. Write the SQL command to retrieve all orders for a specific book with `book_id` 1.
  - i. Write the SQL command to update the price of the book with `book_id` 1 to 12.99.
  - j. Write the SQL command to delete the book with `book_id` 1.

**Note 1: All SQL Command needs to implement in mysql workbrench**

**Note 2: Don't use any internet or google or chatgpt for the solution. You can watch my videos**