

Serializer and DeSerializer

- Serializer → Converts model objects into JSON/XML (for API response) - DeSerializer → Converts JSON/XML back into Python objects or models

What is MVT (Django Architecture)

- M → Model (Database logic) - V → View (Business logic) - T → Template (Frontend / HTML presentation)

What does Model do?

- Represents database tables using ORM - Used for creating, updating, deleting, retrieving data

What is View?

- Handles request and returns response - Contains the business logic

What is Template?

- HTML files with dynamic data - Responsible for the User Interface

Mutable and Immutable

- Mutable → Can be changed (list, dict, set) - Immutable → Cannot be changed (int, float, string, tuple)

DDL and DML

- DDL (Data Definition Language) → CREATE, ALTER, DROP (changes structure) - DML (Data Manipulation Language) → INSERT, UPDATE, DELETE (changes data)

Star Pattern (Python Example)

Code:

```
for i in range(1,6):  
    print('*' * i)
```

Processor, Functions, Trigger (SQL)

- Processor → Handles execution - Function → Reusable SQL block that returns a value - Trigger → Executes automatically on insert/update/delete

Prime Number (Python)

Code:

```
num = 7  
if num > 1:
```

```
for i in range(2, num):
    if num % i == 0:
        print('Not Prime')
        break
else:
    print('Prime')
```

Odd Even (Python)

Code:

```
num = 10
if num % 2 == 0:
    print('Even')
else:
    print('Odd')
```

DRF Methods

- GET → Fetch data - POST → Create data - PUT → Update entire record - PATCH → Partially update record - DELETE → Delete data

OOPS (Object Oriented Programming Concepts)

- Class, Object, Inheritance, Polymorphism, Encapsulation, Abstraction

OOPS APIE (4 pillars of OOPS)

- A → Abstraction - P → Polymorphism - I → Inheritance - E → Encapsulation