- 1. Working with various Data Formats. (**xlrd, xlwt, json, yaml, lxml, csv, base64**)
  2. Pickling in Python. (**pickle module**)
  3. Elementary Knowledge of Multithreading in Python. (**threading**)
  4. Reading and Writing A/V/I with Python.

- **Some Practical Knowledge about How-to's of Networks.**
  1. Sockets, IPs, Ports, and Protocols.
  2. Understanding IP stack.
  3. Tunneling.
  (**socket module**)

- **Some Practical Knowledge about Cryptography.**
  Understanding Hashing & Encryption (AES, RSA & ECC).
  (***hashlib, cryptography libraries***)

  Understanding the HTTP & Websockets Protocol and creating a

  SimpleHTTPServer from scratch. <Mini Project-1> (based on socket module)

- **Revisiting Docker. Extended to Dockerfiles and docker-compose.**

  Working with SQL, ORM, Embedded DBs, NoSQL and Key-Value Caches.
  0. Sqlite3 (Embedded DB)
  1. MongoDB (NoSQL)
  2. PostgreSQL (SQL)
  3. ORM (SQLAlchemy)
  4. Key Value Caches (Redis)

- **Django -**
  Requests - Responses.
  Models, Django ORM and Interaction With Databases.

- **REST API with Django using DRF and Authentication using JWT.**
  # Creating a REST API for Whatsappp like QR Authentication. <Mini Project-2>

- **Reviewing Flask, Japronto and Falcon for REST APIs.**

- **Angular-6 - A Primer for creating Frontend Web Applications.**

- **Flutter - A Primer for creating Android/iOS Applications.**

- **Integrating the practical knowledge. <Major Project> (2 Days)**
  1. Creating a multi-platform application with unified login and logout.
  ie. An app that has login from Android, iOS,(flutter) and Web (Angular)

with a common backend (Django) with Two Database Interfacing (PostgreSQL for Profile Data)(MongoDB for Other Content) along with Cache store (Redis for Session Key store)

2. The application will work as a simple cross platform Google-Keep.