* What is Computer?

→ It is an electronic device, which is the combination of hardware & software componen used to store data, process data & retrive the data.

→ Computer was made by charles babbage He was Mathemation & Mechanical engineering He made the differential engine.

→ World first programmer was Ada laulace He made analytical engine.

* Hardware → It is the combination of electronic components such as Processor RAM, ROM, SMPS, Cooling fan, Graphics card ete to run a software.

→ Processor → It thinks calculates, & make decision, it processes all the tasks & tells other parts what to do.

→ RAM → (Random Access memory) short term memory used to store data temporary for quick access.

→ ROM → (Read only memory) - Permenent memor that stores instruction for starting the computer's & Cannot be modified.

→ Graphic Card = Process image & video & visulize them.

→ SMPS - Switch mode power supply + convert supply electricate power supply in required voltage.
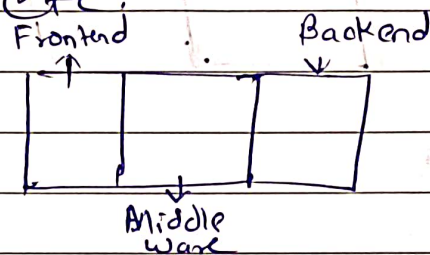
what is software →

☆ What is Software.

The Software is the Collection of Programms ie .. frontend middleware backend which is 3-tier architeure used to interact between user & hardware.

eg. Operating System - windows, linux Mac etc.

Frontend   Backend
Middle ware

— Frontend :- The part of the application that the user interacts with directly
- It focuses on the user interface (UI) and user expenence (UX)
- Technologies used - HTML, CSS, Javascript and framework like React, Angular, Vue.js
- Example :- A webpage where user fill out a form

— Middle ware :- Generally refered to as the plumbing part of a system. Java and C# are common language for writing this part that could be viewed as the glue between the UI and the Data
- Handles tasks such as authentication API Calls, data transformation and routing request

— Backend :- The part of the application responsible for data storage logic and processing

- It Manges the server databases and API to handles requests from the frontend via the Middleware.
- Technologies used :- Node.js, Python, (Djongo/Flask), Java (Spring), PHP, Ruby etc. with database like MySQL, MongoDB or PostgreSQL.