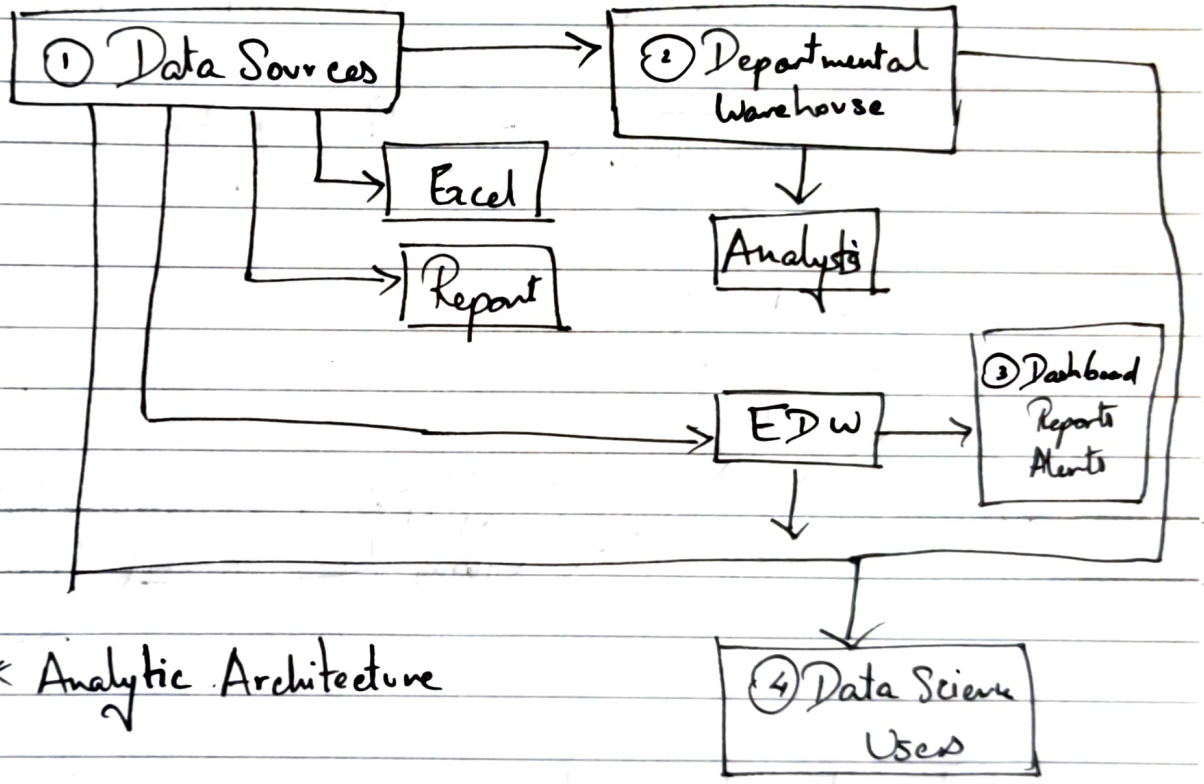
* Data Analytics
* Unit Test 1

Question 1

* Current Analytical Architecture



* Analytic Architecture

Question 2

* Big Data

Data is created constantly, and at an ever-increasing rate. Mobile phones, social media, imaging technologies to determine a medical diagnosis — all these and more, create new data that must be stored somewhere for some purpose.

Devices & Sensors automatically generate diagnostic information that needs to be stored & processed in real time.

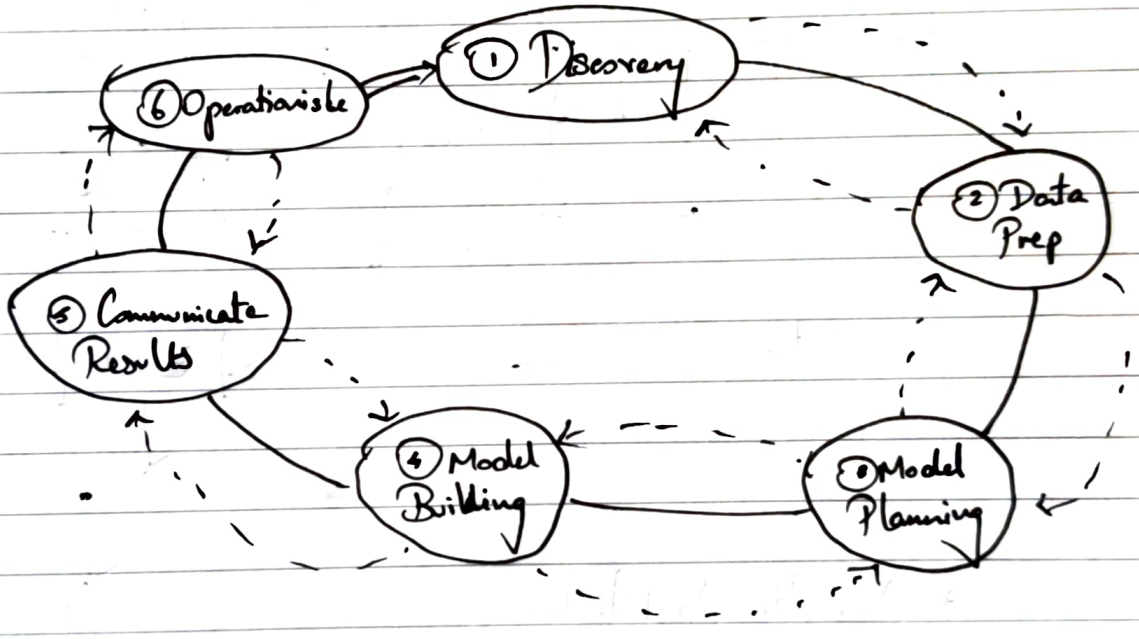
- Big Data Characteristics:

① Complexity of data types & structures.
② Speed of new data creation & growth.

*Question 3

Data analytical Life Cycle

It has six phase as mentioned below:



Phase 1: Learn the business domain and its related data.

Phase 2: Presence of analytic sandbox.

3: Determine the models, techniques & workflow it intends to follow.

4: Develop data sets for testing, training & production

5: In collaboration with major stakeholders, determine if the results of project

6: Deliver final reports, briefing, code & technical documents. & run pilot project.

* Question 4

Big data ecosystem:

- Organisations & data collectors are realising that the data they can gather from individuals contains intrinsic value & as a result, a new economy is emerging.

Following ~~consits~~ consists of Big Data ecosystem:

① Data Devices
Eg. Smart phone, Pc, ATM, RFID.

② Data collectors
Eg. Government, Medical, Internet

③ Data aggregators
Eg. Websites, Media, Analytic services

④ Data Users / Buyes
Eg. Delivery service, Adversiters.

* Question 5

BI vs Data Science

* BI tends to provide reports, dashboard & queries on business questions for the current period or in the past. It make it easier to answer questions related to quater-to-date revenue, progress toward quaterly targets & understand how much of a given product was sold in a prior quater or year.

* Data Science

It tends to use dis-aggreated data in a more forward-looking, exploraty way, focusing on analysing the present &

enabling informed decisions about the future.

* Question 6

4 Main players are:

① Descriptive Analytics

It explains what happened.

② Diagnostic Analytics

Is used to determine why something happened in the past.

③ Predictive Analytics

Is used to predict future outcomes.

④ Prescriptive Analytics

To recommend an action based on the forecast.