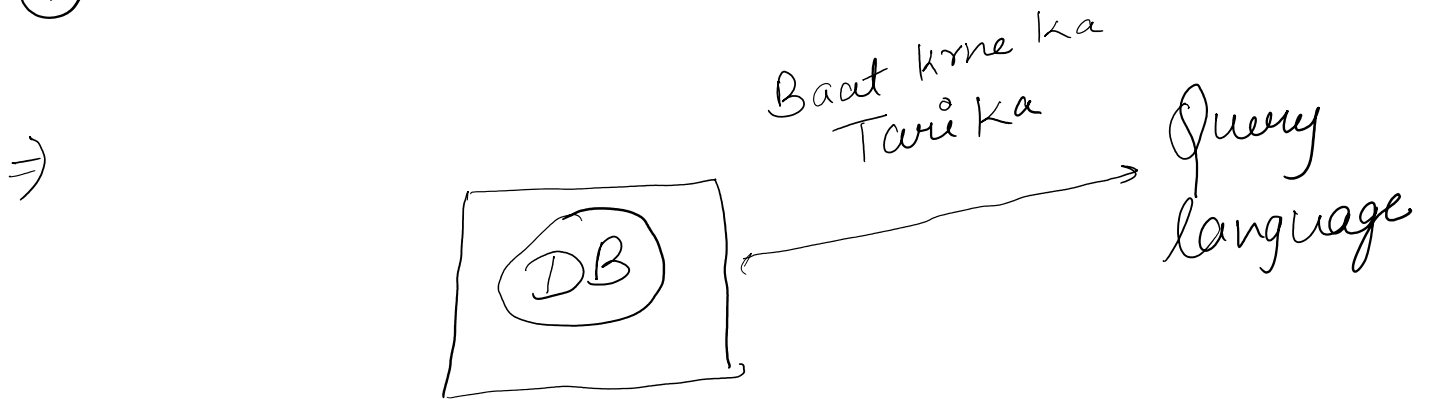
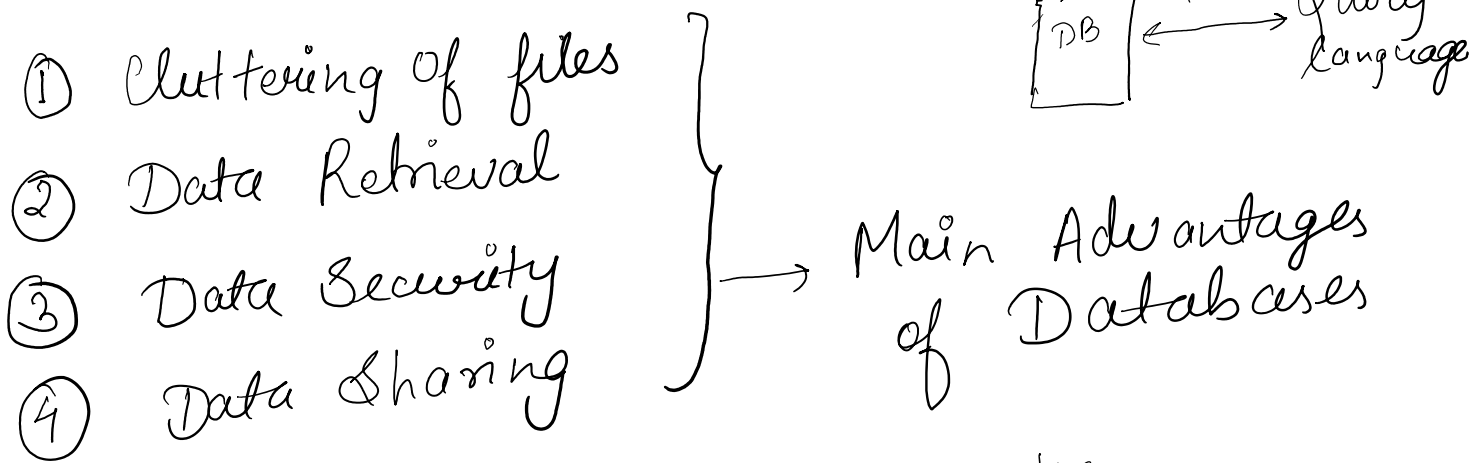


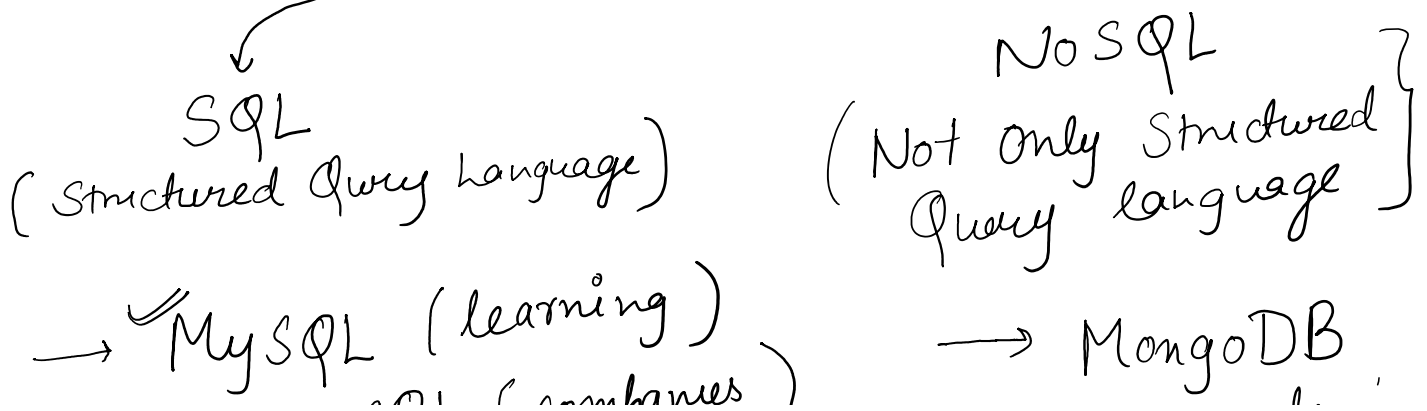
Databases → place where we store data

History

Manual Paper files → Computer files (txt, excel) → Databases



Types



- MySQL (learning)
- PostgreSQL (companies)
- MS SQL server

- MongoDB
- Cassandra
- Firebase

• Differences

SQL

- Store data in form of tables.

name	class	marks
-	-	-
-	-	-

- Login/Signup pages

Name ✓
email ✓
pass ✓

name	email	pass
✓	✓	✓
✓	✓	✓

Banking / financial

- Data does not vary from user to user

NoSQL

- Store data in form of key-pair value graph, document.

```
{ "Name" : "Ram",
  "Class" : "7th",
  "Mark" : 100,
}
```

- Recommendation System (Netflix)

- Data vary from user to user.

ACID AND BASE

26 October 2024 12:44

SQL → ACID
NoSQL → BASE

① ACID

[Atomicity , Consistency , Isolation , Durability]

SQL

② BASE

[Basically Available , Soft State , Eventually Consistent]