# File storage and database

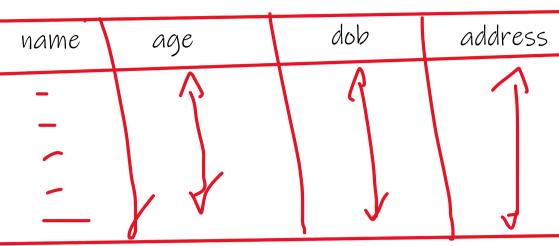
Textual - Notepad, Words... Col. - Excel

1. Redunacy - duplication of data

Emp: Ravi Kumar - 4 different Ravi Krishna - find all the 4 places update

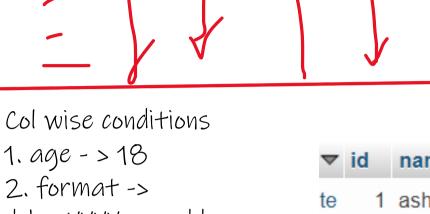
2. Retrieval - line by line

Table format: Rows and Cols Emp. data - 5 emp emp1, emp2, emp3, emp4, emp5 What are attributes / information - Columns? - name, age, dob, address



Datbase Server

- (n) database
  - (n) tables
    - (n) rows and cols
      - (n) data



1. age - > 18 2. format -> dob - YYYY-mm-dd 3. length 4. mandate 5. unqiue

Data types ---String, number, date, boolean....

age dob city name 30 1990-01-30 Trichy 1 ashok raj 27 1990-01-30 Trichy 2 pandirajan 25 1990-01-30 Trichy 3 vignesh

id: number

name: Varchar (ASCII) - Alph, Num, Symbols, Whitespaces

age - number

dob - date (datetime, time)

city - varchar

SQL - Str. Query Language

Database - SQL - Queries

Talk with database - SQL

### Datbase Server - snowflake

- (n) database
  - (n) schemas
    - (n) tables
      - (n) rows and cols
        - (n) data

### Datbase Server

- - (n) tables

### lable definition

```
C 0
       create or replace TABLE
       COMPANY.EMP_DETAIL.EMPLOYEE (
Show less ^
```

create table employee ( first\_name varchar(50), last\_name varchar(50), age number (3,0),

height number (3, 2)dob date

> number (3,0)30 (allowed) 100 (Allowed) 100.40 (not allowed)

number (38, 37)

Ticketing tool:

Tkt No. --> not repeat / unique Movie TK+ - 700 seats-tk+ no. - 1 seat Railway

describe table employee; show tables;

alter table employee add column weight number(3,2);

alter table employee drop column age;

alter table employee rename to team;

describe table team;

DCL - Data Control Lng. Users -> Database

Permission Ravi - Create - certain tables Hari - Any command - on certain tables Kumar - Any ccommands on any tables

- (n) database

  - (n) rows and cols
    - (n) data

varchar (1) - d,g,h

varchar(5) - abcde varchar(10) - 10chars

Number (38,0) -

- whole number -- 10, 23, 5, 56
- decimal number -- 12.45, 20.05
- Max Left 38 - Max right - 37

Date - no special marking

- fixed model

- 4444-mm-dd Eg: 2023-10-6

DateTime, Time, boolean

## Create and with Primary key

create table employee ( emp\_no number (5, 0) primary key, first\_name varchar(50), last\_name varchar(50),

age number (3,0),

height number (3, 2),

dob date



DDL - Data Definition Lng. -- Columns, data types, table names

Insert Update

Select

DML - Data Manipulation

Lang.

Truncate - Actual information Delete

-- Where

# Directly on Snowflake --

1. Python code - Panda

2. Excel - importing to snowflake