

Types of Records in a file

(1) Fixed length

1 Record = 1 row

Size of row = Add sizes of each column

E.g. → Instructor Table

↳

ID → varchar(5) → 5 bytes

name → varchar(20) → 20

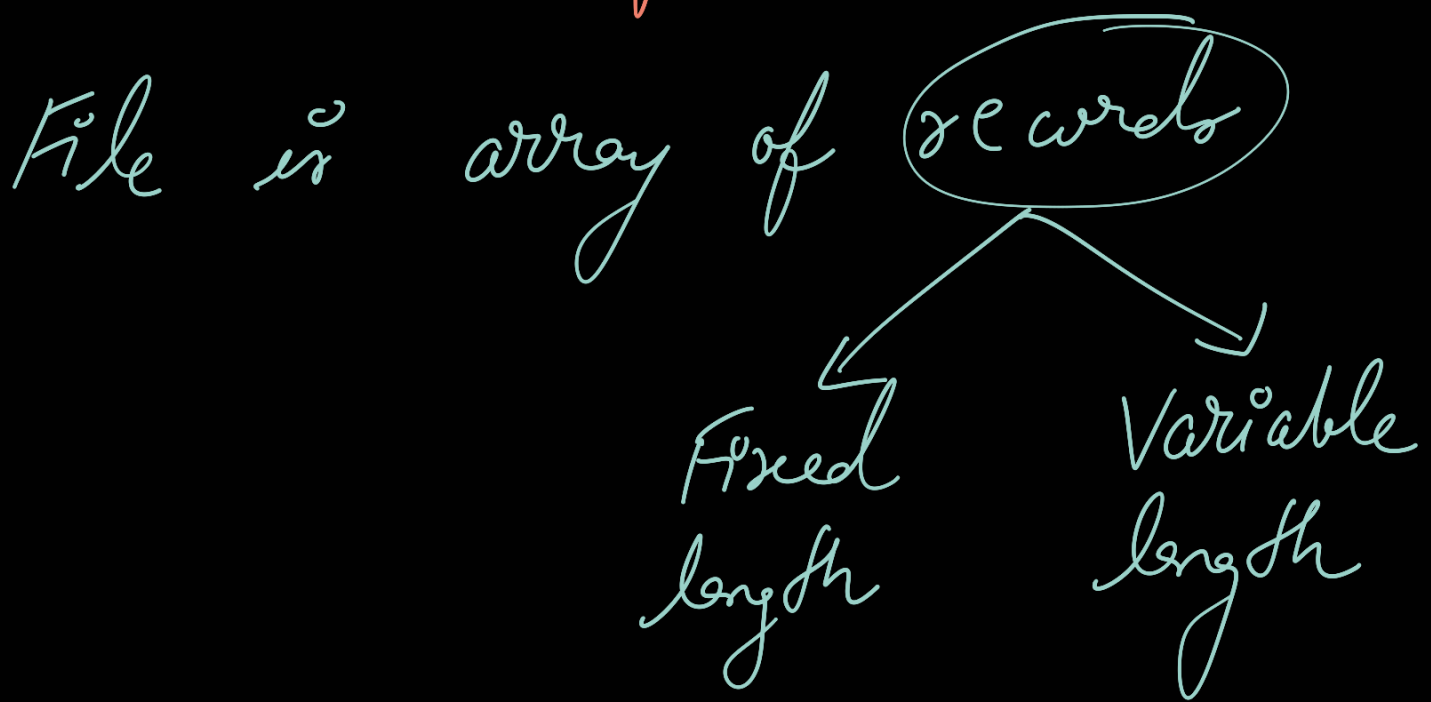
dept_name → varchar(20) → 20

salary numeric(8, 2); → 8

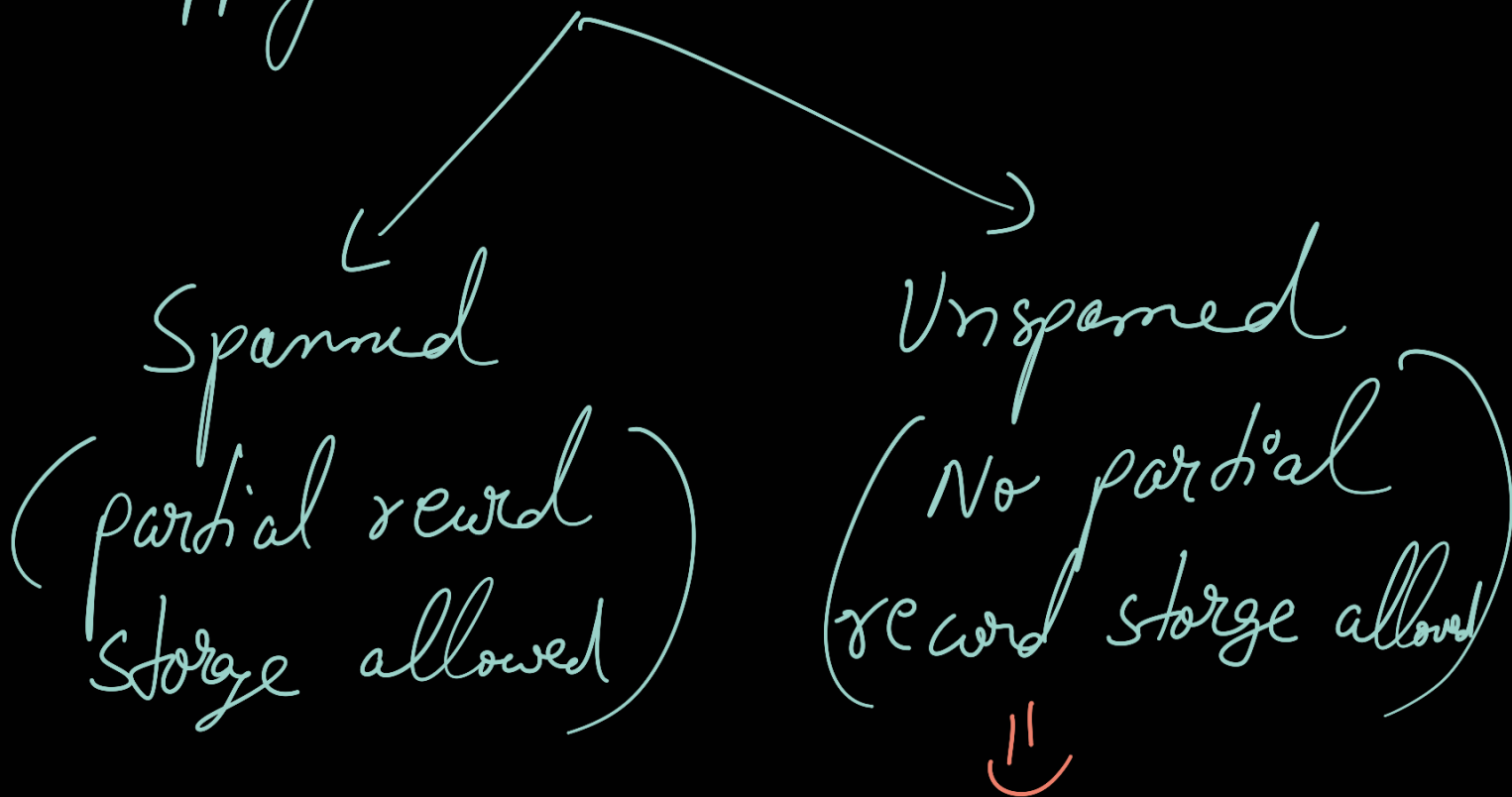
↳ Consider Max character limit for Varchar

Total size of each record = 53 bytes

Consider 1 physical sector = 1 Block
of 400



* Mapping Records to Sector



⇓
Useful for
variable length

Useful for
fixed length record

② Variable length record

⇓
If we consider varchar(), each
record size will be different.

Note → DBMS may create 1 file
for 1 table but it's not
sure, 1 file can contain
records of different Tables.