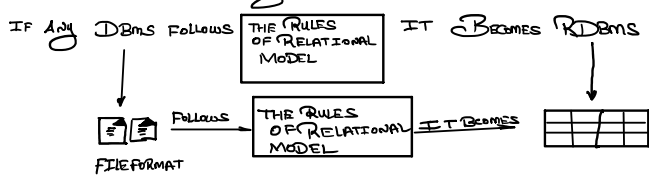


RELATIONAL MODEL THEORY



RULES OF RELATIONAL MODEL / EDGER FRANK CODD RULES

RULE NO:-1

ACCORDING TO E.F CODD DATA/VALUES ENTERED INTO A CELL MUST BE A SINGLE VALUE.



STUDENT

S.ID	S.NAME	BRANCH
1	MICHILE	CIVIL
2	SUPIRYA	CSE

RULE:-2

IN RDBMS EVERYTHING WILL BE STORE IN TABLE FORMAT INCLUDING "META DATA"

STUDENT

S.ID	S.NAME	BRANCH	S.PHOTO
1	MICHILE	CIVIL	
2	SUPIRYA	CSE	

S_PHOTO_NAME	S_PHOTO COLOUR	PHOTO DATE	Loc
MICHILEPHOTO	B&W	12-MAY-2021	HYD
SUPIRYAPHOTO	COLOURPHOTO	13JUN22	AMERAP

RULE NO:-3

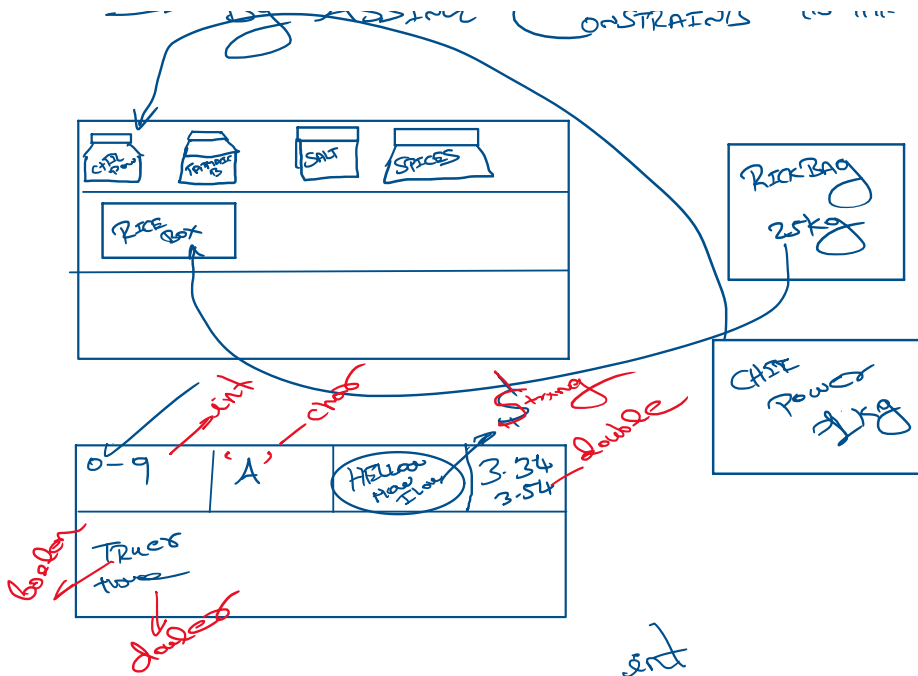
ACCORDING TO EDGER FRANK WE CAN STORE THE DATA IN MULTIPLE TABLES. IF WE NEEDED WE CAN ESTABLISH CONNECTION (LINKS) BETWEEN THE TABLES BY USING PRIMARY KEY AND FOREIGN KEY.

RULE NO 4:-

ACCORDING TO EDGER FRANK DATA VALIDATION WILL BE DONE BY TWO STEPS

- BY ASSIGNING DATATYPES TO THE COLUMN(S)
- BY ASSIGNING CONSTRAINTS TO THE COLUMN(S)

CONSTRAINTS



DATA TYPE:-

THE TYPE OF THE DATA TO BE STORED IN PARTICULAR MEMORY LOCATION IS KNOWN AS

DATA TYPE

DATATYPE IN SQL

- CHAR (SIZE) DATATYPE X
- VARCHAR (SIZE) DATATYPE X
- VARCHAR2 (SIZE) DATATYPE
- NUMBER (PRECISION, [SCALE])
- DATE DATATYPE
- LARGE OBJECTS

- PERFORMANCE
- 2GB
 - 4GB
 - 8GB
 - 16GB
 - 32GB
 - 64GB
 - 128GB
 - 1000GB

CHARACTER LARGE OBJECT (CLOB)
BINARY LARGE OBJECT (BLOB)

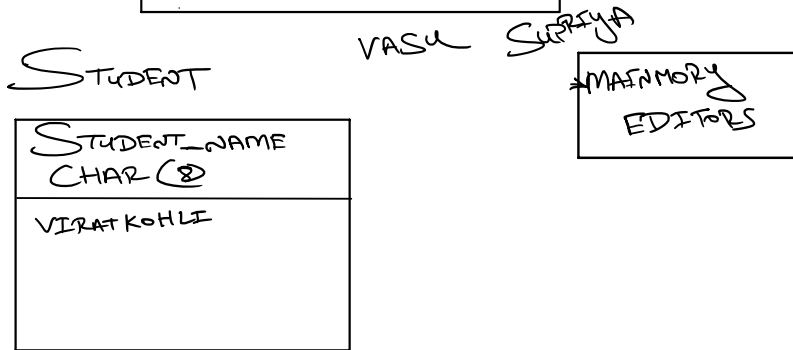
CHAR (SIZE) DATA TYPE:-

- CHAR (SIZE) DATATYPE WILL ACCEPT 'A-Z', 'a-z', '0-9'
- SPECIAL CHARACTERS (\$, @, #, *, /, \, !, ...etc)
- ALPHANUMERIC (16K/1038)

- WHENEVER WE USE CHAR (SIZE) DATATYPE WE MENTION SINGLE QUOTES ('')
- NUM (SIZE) FOLLOWS FIXED MEMORY

WE MENTION SINGLE QUOTES (')

→ CHAR(SIZE) FOLLOWS FIXED MEMORY ALLOCATION.



→ CHAR(SIZE) DATATYPE:

CHAR → CHARACTER

SIZE MEANS NUMBER OF CHARACTER TO BE STORED. WE CAN STORE UP TO 2000 CHARACTER PER THE ROW

NOTEPOINT :- NOWADAYS WE ARE NOT USING CHAR(SIZE) DATATYPE

→ BECAUSE WASTAGE OF TIME/MEMORY

VARCHAR(SIZE):

DATATYPE WILL ACCEPT

'A-Z', 'a-z', '0-9'
SPECIAL CHARACTERS (\$, @, #, *, /, \, !, ...etc)
ALPHANUMERIC (16JK10038)

WHENEVER WE USE VARCHAR(SIZE) DATATYPE WE MENTION SINGLE QUOTES (')

→ VARCHAR(SIZE) FOLLOWS VARIABLE LENGTH | MEMORY ALLOCATION.

VARCHAR(SIZE) DATATYPE

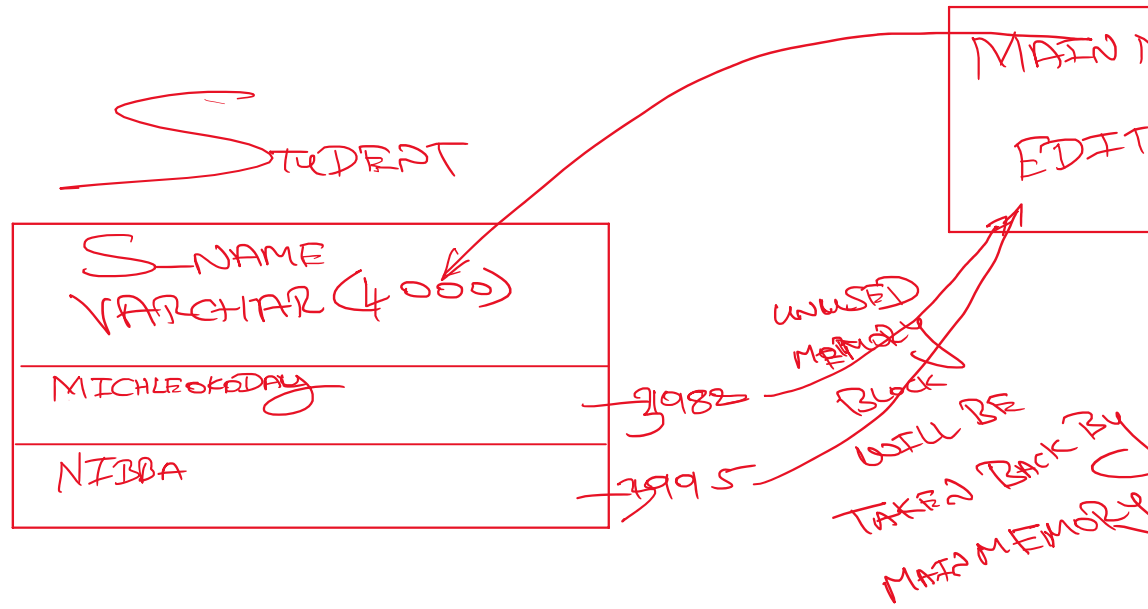
VARCHAR(SIZE) DATATYPE

VAR CHAR MEAN VARIABLE CH

SIZE NUMBER OF CHARACTER TO STORE. WE CAN STORE UP TO 4000 CHARACTERS PER THE ROW.

Syntax:-

```
VAR CHAR(SIZE)
```



DATE DATATYPE:-

DATE DATATYPE IS USED TO STORE THE DATE FORMAT

28-11-2024 | TWO EIGHT - ELEVEN - TWENTY TWENTY FOUR
9 - 11 - 21 | NINE - ELEVEN - TWENTY ONE

CHARACTER

6 BE

HOOD

MEMORY

ORE

0
0

ORE

28-11-2024
28-11-24
11-28-24
11-28-2024
11/28/2024
11/2024/28
11/24/28

TWOFIGHT - LEVEN
TWENTYTWENTYFOUR - LEVEN - TWOFIGHT
TWENTYTWENTYFOUR - TWOFIGHT - LEVEN
11 - NOV - 24
11 - NOVEMBER - 2024

DD - Mon - yy

28 - NOV - 24

DD - Mon - yyyy
28 - NOV - 2024

