Item Key Title Item No

New Release Fin Genre

ub-classification Classification Director

Lead Female Lead Male

**HENTAL FACTS** 

**Promotion Key Customer Key** scalal Fee Store Key

Late Charge

Time Key

Rental Plan Type

PROMOTION

Promotion Type **Promotion Code Promotion Key** Discount Rate

TIME

Store Name

Store Key

Store Code

Zip Code Manager

Week End Flag Day of Month Time Key Quarter Month Date

Year

Windows Lunio

STORE

Figure 10-15 STAR schema example: video rental.

W

CUSTOMER

Customer Name Customer Code

Address State

**Customer Key** 

## RENTAL ITEM

Classification Lead Female b-classification Lead Male Director Genre

## RENTAL FACTS

Store Ke, Promotios, Key Rental Fee Customer ney Time Key

Mam Key Late Charge

# SUSTOMER

Rental Plan Type Customer Name **Customer Code** C stomer Key Address State

Week End Flag Day of Month Time V cy Quarter Month Date

Year

Store Name Store Code Store Key Zip Code Manager

**Promotion Type Promotion Code** Tomotion Key Discount Rate

NOITOMOR

STORE

Figure 10- STAR ema example: video renta

Windows Lunio

Question 1.

ROLLUP\*((doctors, Time -> Month), total visitors)

Question 2

ROLLUP\*(Patient, (Time -> Year, total visitors))

Question 3.

ROLLUP\*(Treatment, (Time -> day, total costs))

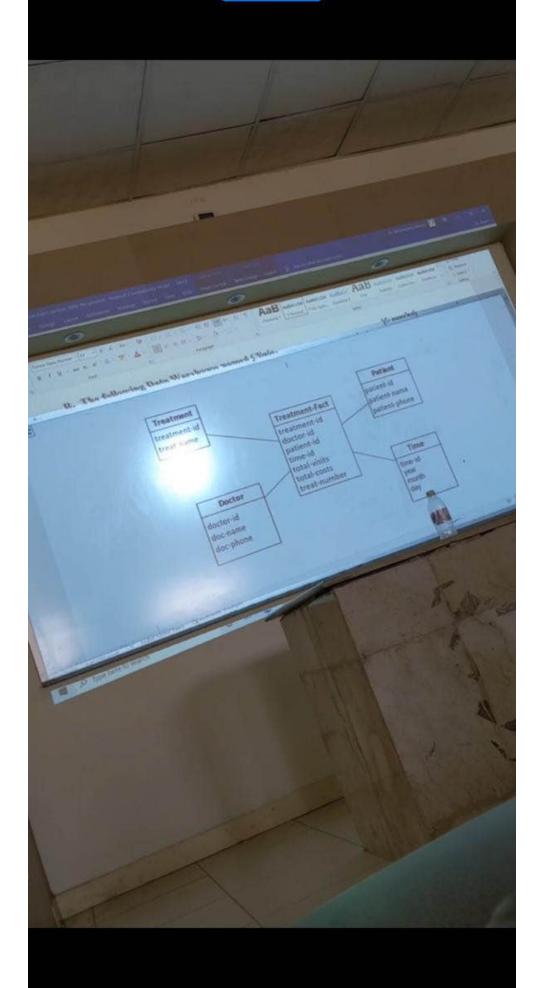
Question 4

MAX(doctors, total visitors, 3) BY Treatment, doctors

Question 5

TOPPERCENT(Treatment, treat-number, 50) BY Treatment





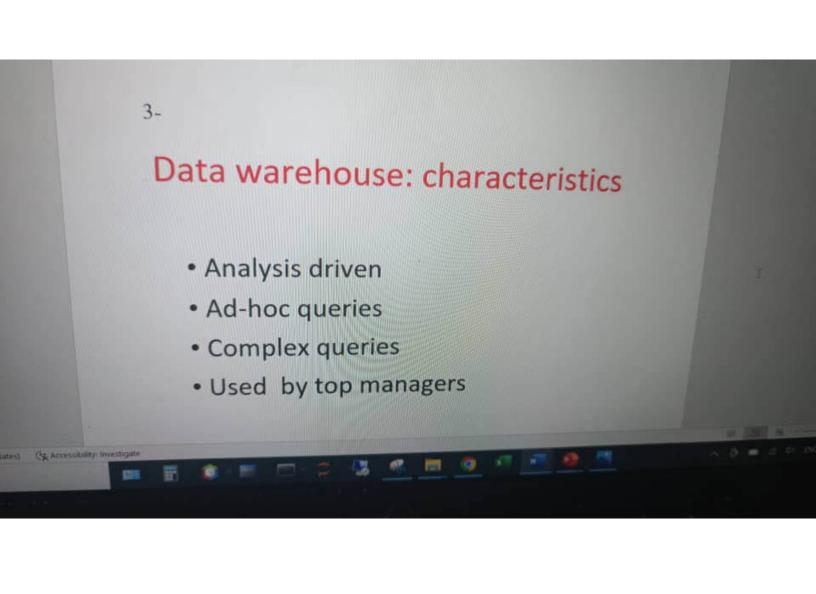
1- edge
2- rollup
3- sort
4- provit
5- max
6- Drop-measure
7- Drill-cross
8- Drill-down
9- percentage
10- slice

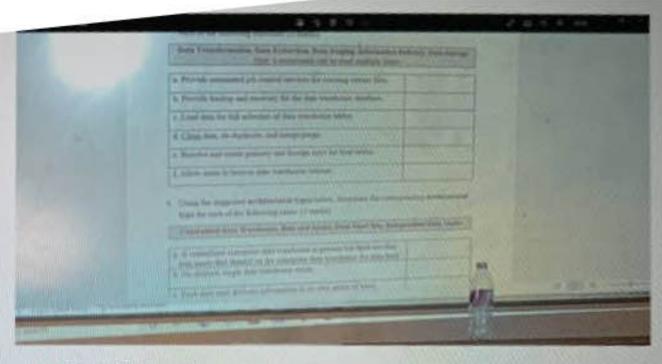
## السوال الثاني الجدول

Data content	Current values	Archived, derived, summarized
Data structure	Optimized for transactions	Optimized for complex queries
Users	Large number	Relatively small number

### السوال اللي تحت الجدول عيوب Bottom-up Approach

- Each data mart has its own narrow view of data
- Permeates redundant data in every data mart





- A. Data Extraction
- **B.** Data Storage
- C. Data Storage
- D. Data Transformation
- E. Data Staging
- F. Information Delivery

### اللي تحت الجدول

- a) Hub and Spoke
- b) Data-Mart Bus
- c) Independent data marts

