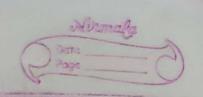
DBMS - END- EXAM

Modhangi. Svavan

A DBMS is typically shaved among many usors. Transactions - from these users can be interleaved to improve the execution time to users queries.

By interleaving queries, usors do not have to wait for other users transactions to complete fully before their own transfor begins. without interleaving, if user A begins a transaction that will take to Seconds to complete, and user B wants to begin a transaction, user B would have to wait an additional lo seconds for user A's transaction to complete before the database would begin processing user B's request

A user must guarantee that his or her transaction does not corrupt data or insert nonsense in the data base. For example, in a banking clata base, a user must guarantee



Mothangi Svavan

that a Cash withdraw transaction accurately models the amount a person removes for his or her account A database application would be worthless if a person removed so dollars from an ATH but the transaction set their balance to sero!

- De Dems must guarantee that transactions are executed fully and independently of other transactions. An essential property of a DBMs is that a transaction should execute atomically, or as if il is the only transaction vanning. Also, transactions will be aborted and the database returned to its initial state. This ensures that the clatabase remains consistent
- (2) 6) DDL 18 important in Representing information in DBMS because if also also to describe External

Shrande O

Mothangi: Svavan

and logical Schemos

DNC is used to access one update data data in is not important for representing the data

The query on EMP schema that could be automatically updated by updating EMP is

ER-LATE VIEW Senior Emp (eid, erame, age, Salary)

A 8 StIECT Leid, Lename, Lage,

Le salary.

From Emp +

WHERE Lage >50

P(RI, Catalog)
P(RI, Catalog)
P(RI, Catalog)
TIRI-PidcRI-Pid=R2-Pid
NRI-Sid6=R2-Sid(RIXR2)

Com D

Mothang: Svavan

a Relational Algebrat

P(R1, catalog)
P(R5, catalog)

TTR1. Pidar R1. Pid = R2. PidAR1. Sid6
= R2. Sid (R1 x R2)

8917

SFLECT C-Sid

FROM Catalog C

WHERE EXISTS CSFLECT CI-Sid

FROM Catalog CI

WHERE CI-Pid = C-Pid AND CI-Sid

6 = C-Sid)

(8) IT Sname (TT Sid ((a Wor = Overloc Parts))

* (a cost < 100 (catalog)) * Suppliers))

=) invalid query.

explanation; This relational algebra statement closs not return anything because of the sequence of projected, it is the only field in the set. Therefore

Otto O

Mathangi: Bravan

O Using emp name as a delastered index
Projecting on same will
not return anything.

Dusing emp name as a dustered index is possible only when every employee will have a unique name. It shis is ensured, the triples will be organised according emp name alphabatically.

empid as a chistered index is definitely possible considering every one already has a unique id assigned to them the tuples will be organized according to empid.

Using both emp name & emped as a clustered indexes may not be possible but it is possible two name one bustered indexed indexed and one non-dustered index.

Mathangi: Svavar

(E) Yes, we can determine the scen of instance.

Sign In a one to many velotion we can consider the column!

attribute with unique values as a primary scen.

6 @ Create oclustured index Ix- emphane. Index DN STUDENT Table (8 tudent Name DESC)

"Select from STUDENTIABLE
This query displays all the
Emails in the descending
order of the student Name. First
the table gets Sorted based
on Student Mame in of st
order then the select query
olisplays the emails in that

Modhangi: Svavan

8 studentip Studentwane and Free 1005 Knighna Knighna Bourse 23 1080 John Null 23 1020 John John John John John 22