

DBMS Lab programs

1. BOOK DATABASE

Create the following tables with properly specifying Primary keys, Foreign keys and solve the following queries: BRANCH (Branchid, Branchname, HOD)

STUDENT (USN, Name, Address, Branchid, sem)

BOOK (Bookid, Bookname, Authorid, Publisher, Branchid)

AUTHOR (Authorid, Authorname, Country, Age)

BORROW (USN, Bookid, Borrowed_date)

Table Creation

1. create table branch(branch_id varchar2(2) primary key, branchname varchar2(5), hod varchar2(10));

2. create table student (usn varchar2(3) primary key, name varchar2(10), address varchar2(15), branched varchar2(2) references branch(branch_id));

3. create table author (authorid varchar2(2) primary key, authorname varchar2(20), country varchar2(10), age number(2));

4. create table book (bookid varchar2(3) primary key, bookname varchar2(15), authorid varchar2(2) references author(authorid), publisher varchar2(10), branch_id varchar2(2) references branch(branch_id));

5. create table borrow (usn varchar2(3) references student(usn), bookid varchar2(3) references book(bookid), borroweddate varchar2(15));

2. Design an ER-diagram for the following scenario, convert the same into a relational model and then solve the following queries.

Consider a Cricket Tournament “BMS CUP” organized by an organization. In the tournament there are many teams are contesting each having a Teamid, Team_Name, City, a coach. Each team is uniquely identified by using Teamid. A team can have many Players and a captain. Each player is uniquely identified by Playerid, having a Name, and multiple phone numbers, age. A player represents only one team. There are many Stadiums to conduct matches. Each stadium is identified using Stadiumid, having a stadium_name, Address involves city, area_name, pincode). A team can play many matches. Each match played between the two teams in the scheduled date and time in the predefined Stadium. Each match is identified uniquely by using Matchid. Each match won by any of the one team that also wants to record in the database. For each match man_of_the match award given to a player.

Table Creation

1. create table player (playerid varchar2(3) primary key, playername varchar2(20), age number(2), phone number(10));

2. create table team (teamid varchar2(3) primary key, teamname varchar2(20), city varchar2(15), coach varchar2(15), captain varchar2(3) references player (playerid));

3. create table match (matched varchar2(3) primary key, result varchar2(3) references team(teamid), mom varchar2(3) references player(playerid));

4. create table stadium (stadiumid varchar2(3) primary key, sname varchar2(20), city varchar2(15), area varchar2(15), pincode number(6));

5. create table plays(matched varchar2(3) references match(matched), teamid1 varchar2(3) references team (teamid), teamid2 varchar2(3) references team (teamid), stadiumid varchar2(3) references stadium (stadiumid), matchdate varchar2(10), time varchar2(6));