**Class Test 03**

You friend wants to start a new Gym center. To ensure proper management of Gym data he decided to maintain a database system. He knows that you already have expertise in developing database management systems. That’s why he came to you to accomplish the task. Your work is to create a relational database management system for your friend’s Gym center. For this work requirement is

RDBMS – Oracle 10g

Language – SQL

Log in as User System and create a user **Manager** who has password **Health\_Gym**.  Manager is granted unlimited table space***.*** Manager also granted the permission to create tables, view and sequence. After login with the username and password creates two table i.e. **Trainer** and **Member**. Trainer table has five columns containing information about trainers **Identification Number, Name, Address, Salary and specialty**. Member table has four columns containing information about members **Identification Number, Name, Address and Bill.** Here trainers **Identification Number** (**t\_id**) and members **Identification Number** (**m\_id**) are the primary key columns of Trainer and Member table. Member table also has a foreign key column **t\_id**. The two tables along with their inserted data are given below

CREATE USER Manager IDENTIFIED BY Health\_Gym;

GRANT UNLIMITED TABLESPACE TO Manager;

GRANT CREATE TABLE, CREATE SEQUENCE, CREATE VIEW TO Manager;

GRANT CREATE SESSION TO Manager;

CONNECT Manager/Health\_Gym;

**Table: Trainer**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **t\_id** | **t\_name** | **t\_address** | **salary** | **specialty** |
| 1 | Rahim | Banani | 5000 | Body building |
| 2 | Karim | Gulshan | 5000 | weight\_loss\_transformation |
| 3 | Prioty | Dhanmondi | 6000 | fitness |

**Table: Member**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **m\_id** | **m\_name** | **m\_address** | **bill** | **t\_id** |
| 1 | Asif | Dhanmondi | 500 | 2 |
| 2 | Rifat | Gulshan | 800 | 1 |
| 3 | Sadia | Basundhora | 600 | 3 |
| 4 | Redowan | Basundhora | 700 | 1 |
| 5 | Fahmida | Khilkhet | 400 | 3 |
| 6 | Afifa | Uttara | 500 | 3 |
| 7 | Sayed | Dhanmondi | 500 | 2 |

CREATE TABLE Trainer (

t\_id NUMBER PRIMARY KEY,

t\_name VARCHAR2(50),

t\_address VARCHAR2(100),

salary NUMBER,

specialty VARCHAR2(50)

);

CREATE TABLE Member (

m\_id NUMBER PRIMARY KEY,

m\_name VARCHAR2(50),

m\_address VARCHAR2(100),

bill NUMBER,

t\_id NUMBER,

CONSTRAINT fk\_trainer FOREIGN KEY (t\_id) REFERENCES Trainer(t\_id)

);

INSERT INTO Trainer (t\_id, t\_name, t\_address, salary, specialty)

VALUES (1, 'Rahim', 'Banani', 5000, 'Body building');

INSERT INTO Trainer (t\_id, t\_name, t\_address, salary, specialty)

VALUES (2, 'Karim', 'Gulshan', 5000, 'weight\_loss\_transformation');

INSERT INTO Trainer (t\_id, t\_name, t\_address, salary, specialty)

VALUES (3, 'Prioty', 'Dhanmondi', 6000, 'fitness');

-- Insert data into Member table

INSERT INTO Member (m\_id, m\_name, m\_address, bill, t\_id)

VALUES (1, 'Asif', 'Dhanmondi', 500, 2);

INSERT INTO Member (m\_id, m\_name, m\_address, bill, t\_id)

VALUES (2, 'Rifat', 'Gulshan', 800, 1);

INSERT INTO Member (m\_id, m\_name, m\_address, bill, t\_id)

VALUES (3, 'Sadia', 'Basundhora', 600, 3);

INSERT INTO Member (m\_id, m\_name, m\_address, bill, t\_id)

VALUES (4, 'Redowan', 'Basundhora', 700, 1);

INSERT INTO Member (m\_id, m\_name, m\_address, bill, t\_id)

VALUES (5, 'Fahmida', 'Khilkhet', 400, 3);

INSERT INTO Member (m\_id, m\_name, m\_address, bill, t\_id)

VALUES (6, 'Afifa', 'Uttara', 500, 3);

INSERT INTO Member (m\_id, m\_name, m\_address, bill, t\_id)

VALUES (7, 'Sayed', 'Dhanmondi', 500, 2);

* Create a sequence that has initial value 1, increments by 1, whose maximum value is 67 and which has neither cache nor cycle. You must use the sequence to assign values to m\_id i.e. the primary key column of the member table.

CREATE SEQUENCE member\_seq

START WITH 1

INCREMENT BY 1

MAXVALUE 67

NOCACHE

NOCYCLE;

* Change the table name member to members.

ALTER TABLE member RENAME TO members;

* Display the member name who pay the highest bill.

SELECT m\_name

FROM members

WHERE bill = (SELECT MAX(bill) FROM members);

* Display the member name by the ascending order of their bill payment.

SELECT m\_name

FROM members

ORDER BY bill ASC;

* Display only those member names whose name start with the letter A.

SELECT m\_name

FROM members

WHERE m\_name LIKE 'A%';

* Write a query to display trainer name, specialty and member name whose t\_id is 3.

SELECT t.t\_name AS trainer\_name, t.specialty, m.m\_name AS member\_name

FROM trainer t

JOIN members m ON t.t\_id = m.t\_id

WHERE t.t\_id = 3;

* Write a query to display member name, address whose trainer name Prioty.

SELECT m.m\_name AS member\_name, m.m\_address

FROM members m

JOIN trainer t ON t.t\_id = m.t\_id

WHERE t.t\_name = 'Prioty';

* Create a view named **trainer\_vw** based on trainer table which shows the trainer id, name, specialty.

CREATE VIEW trainer\_vw AS

SELECT t\_id, t\_name, specialty

FROM trainer;

* Using your view **trainer\_vw** display all trainer names and specialty.

SELECT t\_name, specialty

FROM trainer\_vw;

* Create a view named **Info** that contains the trainer name, specialty, member name. Label the view column Trainer, Specialty, Member.

CREATE VIEW Info AS

SELECT t.t\_name AS Trainer, t.specialty AS Specialty, m.m\_name AS Member

FROM trainer t

JOIN members m ON t.t\_id = m.t\_id;

**\*\*After solving the above questions using Oracle 10g, write the SQLs in a text document (the name of the text document MUST be your ID) and upload it in the provided link in your VUES account**