Table of Contents

School System Management Design Project

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Course: IFSC 3330 Current Trends in Database Technology

Introduction

Schools play a very important role in our world. The education system is one of the biggest contributors to technology, every school system focuses on improving their technology, because they have to keep up with so many students, and their personal information. As they store this data they also have to store their parents data. Then there are faculty members, like teachers, employees, custodians,and many more.This data doest just help school districts to keep up with the students and their faculty members, it also helps them improve the quality of education they are providing. In this project I am developing a school management system which explains how school districts keep up with student information and their faculty information. I have designed and developed a student management system which managed the database of both, an individual student or a whole class.

I am using Oracle, for this project in which the database is a collection of data treated as a unit.The purpose of a database is to store and retrieve related information and view within seconds. Oracle is used by many big companies like AVATA, CISCO, Kinetica, Cognizant, Argent Energy and etc,.

I do not have a very strong knowledge about this software Oracle, but I have attended Dr. Ningning Wu course, Database Concepts in spring of 2018, which is basically intro to Oracle. This project is divided into 5 Phases (or 5 Parts). Dr. NingningWu has been extremely helpful all semester about any question on this project.

In this project I created a database for a school district, which includes Entity Relationship Diagram, Relation Schema, using Oracle, SQL Server, with 8 queries.

Objective

- Create a system which does not require Paper files anymore.
- Create a system which is easy to use for faculty members.
- Create a system that is easy to maintain student records.
- Create a system that maintain all records of students and classes in database.
- Create a system that maintains all records of the Faculty.
- Create a system that improves the efficiency of the system and helps manage schools, student and faculty personal information.

Entities and attributes

Student

- ID
- Name
- Parents name
- Age
- Gender

- Address
- State
- Country
- Contact number

Admin

- ID
- Name
- Phone Number
- Email

Faculty

- ID
- Name
- Phone number
- Gender
- Email

Class

- ID
- Name
- Grade
- Number of students
- Email

Course

- ID
- Name

Relationships

Enrolls

This relation enrolls is a ONE TO MANY relation between Student and Admin.

BelongsTo

This relation takes is a MANY TO ONE relation between Student and Class.

Teaches

This relation teaches is a MANY TO MANY relation between Faculty and Course.

Faculty

This relation Faculty is a MANY TO MANY relation between Faculty and Class

Constraints

Student

- Primary Key: ID
- Foreign key: Class_ID
- Not Null: Class_ID, Name, Address, Contact number, Parents Information, Address, Country, and State

Admin

- Primary Key: ID
- Unique: Email
- Not Null: Phone number, Email, Name

Faculty

- Primary Key: ID
- Unique: Email
- Not Null: Name, Address, Phone number, Email, Gender

Course

- Primary Key: ID
- Not Null: Name

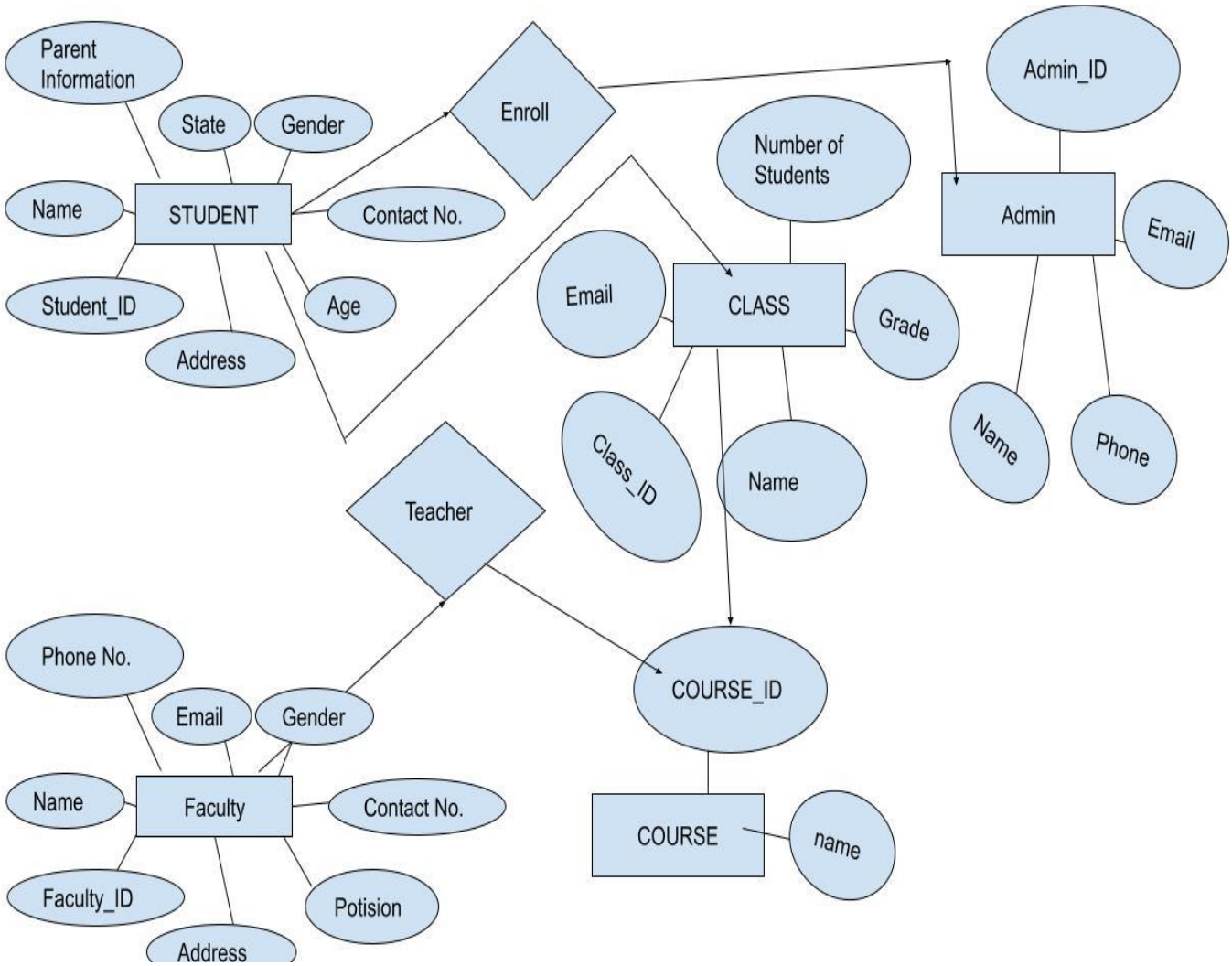
Class

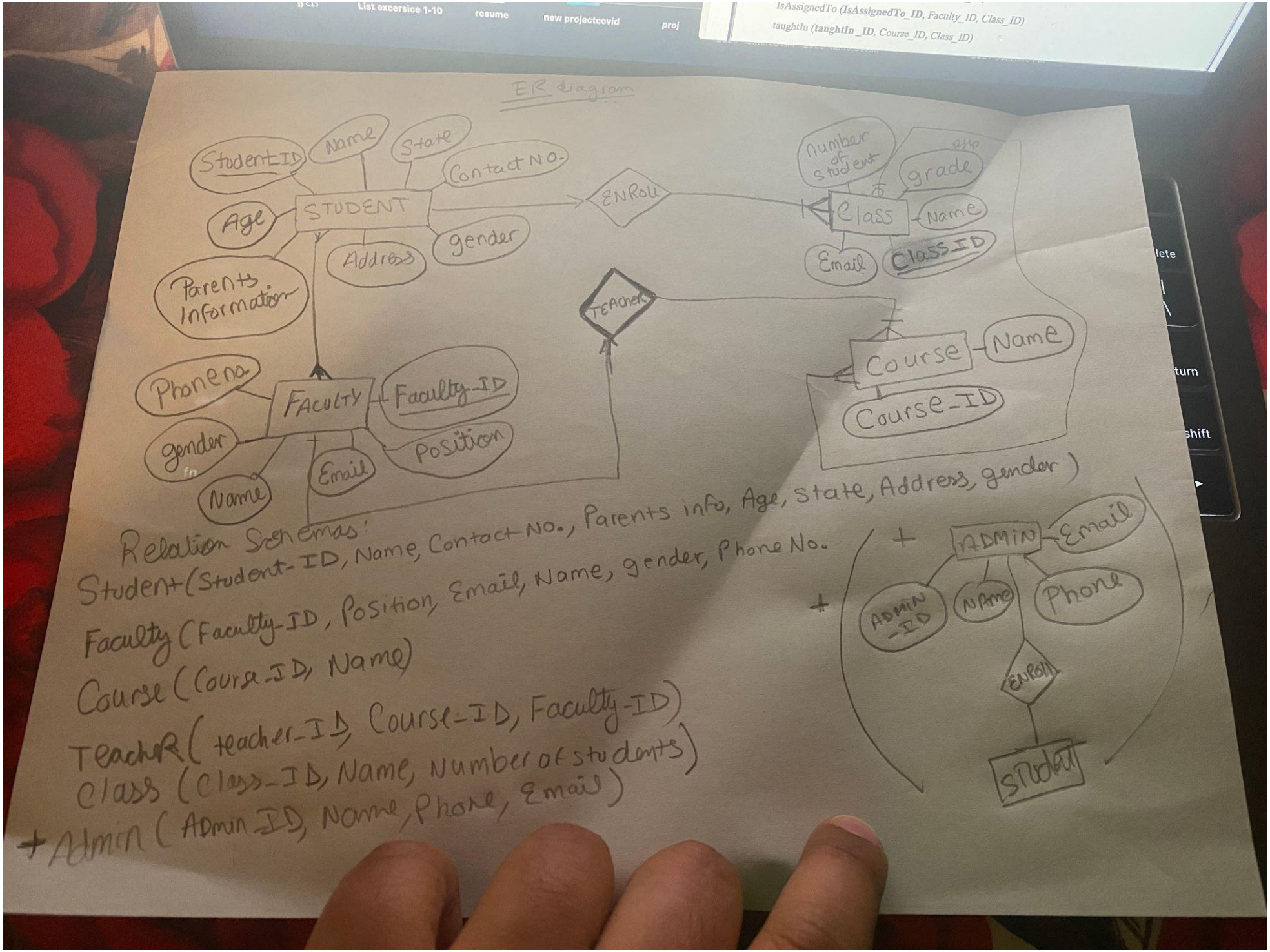
- Primary Key: ID
- Not Null: Name

Teaches

- Primary Key: teaches_ID
- Foreign key: Course_ID, Faculty_ID

Entity relationship Diagram


Parent Information
State
Gender
Enroll
Admin_ID
Number of Students
Name
STUDENT
Contact No.
Admin
Email
Student_ID
Age
Email
CLASS
Grade
Address
Class_ID
Name
Name
Phone
Teacher
Phone No.
COURSE_ID
Email
Gender
Name
Faculty
Contact No.
COURSE
name
Faculty_ID
Potision
Address


ER diagram
StudentID
Name
State
Contact NO.
Age
STUDENT
gender
Address
Parents Information
ENROLL
Number of student
grade
Class
Name
Email
ClassID
TEACHER
Course
Name
Course_ID
Phone no.
FACULTY
Faculty_ID
gender
Position
Email
Name
Relation Schemas:
Student (Student_ID, Name, Contact_No., Parents info, Age, State, Address, gender)
Faculty (Faculty_ID, Position, Email, Name, gender, Phone No.
Course (Course_ID, Name)
TeacheR (teacher_ID, Course_ID, Faculty_ID)
class (class_ID, Name, Number of students)
+Admin (Admin_ID, Name, Phone, Email)
ADMIN
Email
ADMIN_ID
Name
Phone
ENROLL
STUDENT

Relational Schema

- Student (Student_ID, Class_ID, Name, Guardian name, Age, Gender, Address, State, Country, Contact number)
- Faculty (Faculty_ID, Name, Phone number, Gender, Potision, Email)
- Course (ID, Name)
- Class (ID, Name, Section, No. of students)
- Teaches (teaches_ID, Course_ID, Faculty_ID)
- Admin (Admin_ID, Name, Phone, Email)

Functional Dependencies

Admin

{ Admin_ID -> Name, Admin_ID-> Phone number, Admin_ID->Email }

Student

{ Student_ID->Name, Student_ID->Parents name, Student_ID->Age, Student_ID-> Gender, Student_ID-> Address}

{ State-> Country}

Course

{Course-> ID, Course->Name}

Faculty

{ Faculty_ID->Admin_ID, Faculty_ID->Name, Faculty_ID->PhoneNum, Faculty_ID->Gender, Faculty_ID-> position, Faculty_ID->Email}

Class

{Class_ID->Name, Class_ID-> No. of students}

Normalization

Admin Table

Admin_ID	Name	Email	PhoneNo
1	Joseph Saint	Joseph@gmail.com	5018474848
2	Mary Lopez	Maryl@gmail.com	5018474849
3	Jennifer Winget	JWinget@gmail.com	5018474845

Admin_ID	Name	Email	PhoneNo

1	Joseph Saint	Joseph@gmail.com	5018474848
1	Joseph Saint	Joseph@gmail.com	5018474840
2	Mary Lopez	Maryl@gmail.com	5018474849
3	Jennifer Winget	JWinget@gmail.com	5018474845

Tables after Normalization

Admin Table

Admin_phoneID	Admin_ID	PhoneNo
1	1	5018474848
2	1	5018474840
3	2	5018474849
4	3	5018474845

Admin Phone Table

Admin_ID	Name	Email
1	Joseph Saint	Joseph@gmail.com
2	Mary Lopez	Maryl@gmail.com
3	Jennifer Winget	JWinget@gmail.com

Faculty Table

Faculty_ID	Name	Gender	position	Phone_Number	Email
5	Olives John	Male	BS Maths	5018474822	OJ@gmail.com
6	James Bond	Male	MS Physics	5018474833	JB@gmail.com
7	Julia Rose	Female	BS Computer Science	5018474811	JR@gmail.com

Faculty_ID	Name	Gender	position	Phone_Number	Email
5	Olives John	Male	BS Maths	5018474822	OJ@gmail.com
5	Olives John	Male	BS Maths	5018475555	OJ@gmail.com
6	James Bond	Male	MS Physics	5018474833	JB@gmail.com
7	Julia Rose	Female	BS Computer Science	5018474811	JR@gmail.com
7	Julia Rose	Female	BS Computer Science	5018474444	JR@gmail.com

Tables after Normalization

Faculty Table

Faculty_ID	Name	Gender	position	Email
5	Olives John	Male	BS Maths	OJ@gmail.com
6	James Bond	Male	MS Physics	JB@gmail.com
7	Julia Rose	Female	BS Computer Science	JR@gmail.com

Faculty Phone Table

Fac_phoneID	Faculty_ID	Phone_Number
11	5	5018476666
12	5	5018475555
13	6	50184766433
14	7	50184748117
15	7	5018474444

Relational Schema after Normalization

Admin (**Admin_ID**, Name, Email)

Admin_phone(Admin_phoneID, Admin_ID, Phone)

Student (**Student_ID, Class_ID, Admin_ID**, Name, Guardian name, Age, Gender, Address, State, Country, Contact number)

Faculty (**Faculty_ID,** Name, Gender, position, Email)

Faculty_Phone(Fac_phoneID, Fac_ID, Phone)

Course (**ID**, Name)

Class (**ID**, Name, Section, No. of students)

Teaches (**teaches_ID**, Course_ID, Faculty_ID)

The above table is in 1NF. The table also has no partial and transitive dependency hence it also fulfills the requirement of the 2Nf and 3NF.

Tables Creation and Insertion in Oracle

Admin Table:

Creation:

```
CREATE TABLE Admin (
 Admin_ID Number CONSTRAINT admin_id PRIMARY KEY,
 Admin_Name NCHAR(30) NOT NULL,
 Email VARCHAR2(360) NOT NULL UNIQUE
);
```

	COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
1	ADMIN_ID	NUMBER	No	(null)	1	(null)
2	ADMIN_NAME	NCHAR(30 CHAR)	No	(null)	2	(null)
3	EMAIL	VARCHAR2(360 B...	No	(null)	3	(null)

Insertion:

INSERT ALL

INTO ADMIN(Admin_ID,Admin_Name,Email) VALUES(1,'James Bond', 'James@gmail.com')

INTO ADMIN(Admin_ID,Admin_Name,Email) VALUES(2,'Mathew Blue', 'MathewB@gmail.com')

INTO ADMIN(Admin_ID,Admin_Name,Email) VALUES(3,'Smith Black', 'Smith@gmail.com')

INTO ADMIN(Admin_ID,Admin_Name,Email) VALUES(4,'Avril Lavign', 'Avril@gmail.com')

INTO ADMIN(Admin_ID,Admin_Name,Email) VALUES(5,'Justin Mahone', 'JM@gmail.com')

INTO ADMIN(Admin_ID,Admin_Name,Email) VALUES(6,'Indiana Jones', 'Jones@gmail.com')

Select * FROM dual;

	ADMIN_ID	ADMIN_NAME	EMAIL
1	1	James Bond	James@gmail.com
2	2	Mathew Blue	MathewB@gmail.com
3	3	Smith Black	Smith@gmail.com
4	4	Avril Lavign	Avril@gmail.com
5	5	Justin Mahone	JM@gmail.com
6	6	Indiana Jones	Jones@gmail.com

Admin_Ph Table

Creation:

CREATE TABLE Admin_ph (

Adminph_ID Number CONSTRAINT adminph_ID PRIMARY KEY,

AdminID NUMBER NOT NULL CONSTRAINT admin_ph_admin_fk REFERENCES Admin (Admin_ID),

PhoneNo Number NOT NULL

);

	COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
1	ADMINPH_ID	NUMBER	No	(null)	1	(null)
2	ADMINID	NUMBER	No	(null)	2	(null)
3	PHONENO	NUMBER	No	(null)	3	(null)

Insertion:

```
INSERT ALL
INTO Admin_ph(Adminph_ID,AdminID,PhoneNo) VALUES(3,1,0323232442)
INTO Admin_ph(Adminph_ID,AdminID,PhoneNo) VALUES(1,2,0237282123)
INTO Admin_ph(Adminph_ID,AdminID,PhoneNo) VALUES(2,2,0323244848)
INTO Admin_ph(Adminph_ID,AdminID,PhoneNo) VALUES(4,3,0232453422)
INTO Admin_ph(Adminph_ID,AdminID,PhoneNo) VALUES(5,4,0232432442)
INTO Admin_ph(Adminph_ID,AdminID,PhoneNo) VALUES(6,5,0234332442)
INTO Admin_ph(Adminph_ID,AdminID,PhoneNo) VALUES(7,5,0234432442)
INTO Admin_ph(Adminph_ID,AdminID,PhoneNo) VALUES(8,6,0234322344)
Select * FROM dual;
```

	ADMINPH_ID	ADMINID	PHONENO
1	3	1	323232442
2	1	2	237282123
3	2	2	323244848
4	4	3	232453422
5	5	4	232432442
6	6	5	234332442
7	7	5	234432442
8	8	6	234322344

Faculty Table

Creation:

```
CREATE TABLE Faculty (
 Fac_ID Number CONSTRAINT Fac_idPRIMARY KEY,
```

Fac_Name NCHAR(30) NOT NULL,

position VARCHAR2(60) NOT NULL,

Fac_gender VARCHAR2(20) Default 0,

Email VARCHAR2(360) NOT NULL UNIQUE

);

	COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
1	FAC_ID	NUMBER	No	(null)	1	(null)
2	FAC_NAME	NCHAR(30 CHAR)	No	(null)	2	(null)
3	QUALIFICATION	VARCHAR2(60 BYTE)	No	(null)	3	(null)
4	FAC_GENDER	VARCHAR2(20 BYTE)	Yes	0	4	(null)
5	EMAIL	VARCHAR2(360 B...	No	(null)	5	(null)

Insertion:

INSERT ALL

INTO Faculty(Fac_ID,Fac_Name,position, Fac_gender, Email) VALUES(1,'Taylor Swift','MS Computer Science', 'Female', 'Taylor@gmail.com')

INTO Faculty(Fac_ID,Fac_Name,position, Fac_gender, Email) VALUES(2,'Tom Cruise','BS Computer Science', 'Male', 'tom@gmail.com')

INTO Faculty(Fac_ID,Fac_Name,position, Fac_gender, Email) VALUES(3,'Jerry James','BS Software Engineering', 'Male', 'Jerry@gmail.com')

INTO Faculty(Fac_ID,Fac_Name,position, Fac_gender, Email) VALUES(4,'Justin Bebber','MS Physics', 'Male', 'JB@gmail.com')

INTO Faculty(Fac_ID,Fac_Name,position, Fac_gender, Email) VALUES(5,'Julia Rose','BS Maths', 'Female', 'JRose@gmail.com')

INTO Faculty(Fac_ID,Fac_Name,position, Fac_gender, Email) VALUES(6,'Suho Paal','BS English', 'Male', 'Suhop@gmail.com')

Select * FROM dual;

	FAC_ID	FAC_NAME	QUALIFICATION	FAC_GENDER	EMAIL
1	1	Taylor Swift	MS Computer Science	Female	Taylor@gmail.com
2	2	Tom Cruise	BS Computer Science	Male	tom@gmail.com
3	3	Jerry James	BS Software Engineering	Male	Jerry@gmail.com
4	4	Justin Bebber	MS Physics	Male	JB@gmail.com
5	5	Julia Rose	BS Maths	Female	JRose@gmail.com
6	6	Suho Paal	BS English	Male	Suhop@gmail.com

Fac_ph Table

Creation:

CREATE TABLE Fac_ph (

FacPh_ID Number CONSTRAINT FacPh_ID PRIMARY KEY,

FacID NUMBER NOT NULL CONSTRAINT Fac_ph_Fac_fk REFERENCES Admin (Admin_ID),

PhoneNo Number NOT NULL

);

	COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
1	FACPH_ID	NUMBER	No	(null)	1	(null)
2	FACID	NUMBER	No	(null)	2	(null)
3	PHONENO	NUMBER	No	(null)	3	(null)

Insertion:

INSERT ALL

INTO Fac_ph(facph_id,facid,PhoneNo) VALUES(1,1,0322484829)

INTO Fac_ph(facph_id,facid,PhoneNo) VALUES(2,1,0322484234)

INTO Fac_ph(facph_id,facid,PhoneNo) VALUES(3,2,0234142232)

INTO Fac_ph(facph_id,facid,PhoneNo) VALUES(4,3,0232484829)

INTO Fac_ph(facph_id,facid,PhoneNo) VALUES(5,4,0121848224)

```
 INTO Fac_ph(facph_id,facid,PhoneNo) VALUES(6,5,0323413311)

 INTO Fac_ph(facph_id,facid,PhoneNo) VALUES(7,5,0123454333)

 INTO Fac_ph(facph_id,facid,PhoneNo) VALUES(8,6,0213248482)

Select * FROM dual;
```

	FACPH_ID	FACID	PHONENO
1	1	1	322484829
2	2	1	322484234
3	3	2	234142232
4	4	3	232484829
5	5	4	121848224
6	6	5	323413311
7	7	5	123454333
8	8	6	213248482

Classes Table
Creation:

```
CREATE TABLE Classes(
 Class_ID Number PRIMARY KEY,
 Class_Name NCHAR(30),
 Section NCHAR(20),
 Numberof_stud Number
);
```

	COLUMN_...	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
1	CLASS_ID	NUMBER	No	(null)	1	(null)
2	CLASS_NAME	NCHAR(30 CHAR)	Yes	(null)	2	(null)
3	SECTION	NCHAR(20 CHAR)	Yes	(null)	3	(null)
4	NUMBEROF_STUD	NUMBER	Yes	(null)	4	(null)

Insertion:

INSERT ALL

INTO Classes(Class_ID, Class_Name, Section, numberof_stud)VALUES(9,'ME-1','A',25)

INTO Classes(Class_ID, Class_Name, Section, numberof_stud)VALUES(10,'ME-1','B',30)

INTO Classes(Class_ID, Class_Name, Section, numberof_stud)VALUES(11,'RM-2','A',75)

INTO Classes(Class_ID, Class_Name, Section, numberof_stud)VALUES(12,'MD-1','A',15)

INTO Classes(Class_ID, Class_Name, Section, numberof_stud)VALUES(13,'SM-3','A',30)

INTO Classes(Class_ID, Class_Name, Section, numberof_stud)VALUES(14,'SM-3','B',25)

Select * FROM dual;

	CLASS_ID	CLASS_NAME	SECTION	NUMBEROF_STUD
1	9	ME-1	A	25
2	10	ME-1	B	30
3	11	RM-2	A	75
4	12	MD-1	A	15
5	13	SM-3	A	30
6	14	SM-3	B	25

Student Table

Creation:

CREATE TABLE Student (

Stud_ID Number CONSTRAINT Stud_id PRIMARY KEY,

Stud_Name NCHAR(30) NOT NULL,

ClassID NUMBER NOT NULL CONSTRAINT Student_Class_fk REFERENCES Classes (Class_ID),

Parent NCHAR(30) NOT NULL,

Stud_gender NCHAR(30) Default 0,

```
Stud_Age NUMBER NOT NULL,
ContactNo Number NOT NULL,
Address NCHAR(50) NOT NULL,
Country_state NCHAR(30) NOT NULL,
Country NCHAR(30) NOT NULL
);
```

	COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
1	STUD_ID	NUMBER	No	(null)	1	(null)
2	STUD_NAME	NCHAR(30 CHAR)	No	(null)	2	(null)
3	CLASSID	NUMBER	No	(null)	3	(null)
4	GURADIAN	NCHAR(30 CHAR)	No	(null)	4	(null)
5	STUD_GENDER	NCHAR(30 CHAR)	Yes	0	5	(null)
6	STUD_AGE	NUMBER	No	(null)	6	(null)
7	CONTACTNO	NUMBER	No	(null)	7	(null)
8	ADDRESS	NCHAR(50 CHAR)	No	(null)	8	(null)
9	COUNTRY_STATE	NCHAR(30 CHAR)	No	(null)	9	(null)
10	COUNTRY	NCHAR(30 CHAR)	No	(null)	10	(null)

Insertion:

```
INSERT ALL
 INTO student( Stud_ID, Stud_Name, ClassID ,Parent,Stud_gender, Stud_Age, ContactNo,
Address, Country_state, Country)VALUES(20,'William Oscar', 9, 'Oscar Olive','Male',
12,0230873603,'street-12,house-14,SoanGarden','United States', 'Washington')

 INTO student( Stud_ID, Stud_Name, ClassID ,Parent,Stud_gender, Stud_Age, ContactNo,
Address, Country_state, Country)VALUES(21,'Jannifer Patricia', 9, 'Patricia','Female',
15,0568765345,'street-18,house-11,Harley','United States', 'Washington')

 INTO student( Stud_ID, Stud_Name, ClassID ,Parent,Stud_gender, Stud_Age, ContactNo,
Address, Country_state, Country)VALUES(22,'Steven Brian', 10, 'Brian Thomas','Male',
18,0986785432,'street-65,house-45,RiverGarden','United States', 'Washington')

 INTO student( Stud_ID, Stud_Name, ClassID ,Parent,Stud_gender, Stud_Age, ContactNo,
Address, Country_state, Country)VALUES(23,'Thomas Richard', 11, 'R Michael','Male',
20,0767534567,'street-72,house-42,E-11','United States', 'Washington')

 INTO student( Stud_ID, Stud_Name, ClassID ,Parent,Stud_gender, Stud_Age, ContactNo,
Address, Country_state, Country)VALUES(24,'Mary Alfred', 12, 'Alfred John','Female',
15,0564532567,'street-18,house-4,SoanGarden','United States', 'Washington')

 INTO student( Stud_ID, Stud_Name, ClassID ,Parent,Stud_gender, Stud_Age, ContactNo,
```

Address, Country_state, Country)VALUES(25,'Harry Leo', 9, 'Mary ','Male',
13,0764367890,'street-17,house-18,NewHarley','United States', 'Washington')

Select * FROM dual;

	STUD_ID	STUD_NAME	CLASSID	GURADIAN	STUD_GENDER	STUD_AGE	CONTACTNO	ADDRESS	COUNTRY_STATE	COUNTRY
1	20	William Oscar ...	9	Oscar Olive ...	Male ...	12	230873603	street-12,house-14,SoanGarden ...	United States ...	Washington...
2	21	Jannifer Patricia ...	9	Patricia ...	Female ...	15	568765345	street-18,house-11,Harley ...	United States ...	Washington...
3	22	Steven Brian ...	10	Brian Thomas ...	Male ...	18	986785432	street-65,house-45,RiverGarden...	United States ...	Washington...
4	23	Thomas Richard ...	11	R Michael ...	Male ...	20	767534567	street-72,house-42,E-11 ...	United States ...	Washington...
5	24	Mary Alfred ...	12	Alfred John ...	Female ...	15	564532567	street-18,house-4,SoanGarden ...	United States ...	Washington...
6	25	Harry Leo ...	9	Mary ...	Male ...	13	764367890	street-17,house-18,NewHarley ...	United States ...	Washington...

Course Table

Creation:

CREATE TABLE Course (

Course_ID Number PRIMARY KEY,

Course_Name NCHAR(30)

);

	COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
1	COURSE_ID	NUMBER	No	(null)	1	(null)
2	COURSE_NAME	NCHAR(30 CHAR)	Yes	(null)	2	(null)

Insertion:

INSERT ALL

INTO Course(Course_ID, Course_Name) Values(12,'Maths-1')

INTO Course(Course_ID, Course_Name) Values(10,'English-2')

INTO Course(Course_ID, Course_Name) Values(8,'History')

INTO Course(Course_ID, Course_Name) Values(20,'Maths-2')

INTO Course(Course_ID, Course_Name) Values(30,'Geography')

INTO Course(Course_ID, Course_Name) Values(22,'Computer')

Select * FROM dual;

	COURSE_ID	COURSE_NAME
1	12	Maths-1
2	10	English-2
3	8	History

Teaches Table

Creation:

```
CREATE TABLE Teaches (
 Teaches_ID Number CONSTRAINT Teaches_ID PRIMARY KEY,
 FacID NUMBER NOT NULL CONSTRAINT teaches_ID_Fac_fk REFERENCES Faculty
(Fac_ID),
 Course_ID NUMBER NOT NULL CONSTRAINT teaches_ID_Course_fk REFERENCES
Course (Course_ID)
);
```

	COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
1	TEACHES_ID	NUMBER	No	(null)	1	(null)
2	FACID	NUMBER	No	(null)	2	(null)
3	COURSE_ID	NUMBER	No	(null)	3	(null)

Insertion:

```
INSERT ALL
 INTO Teaches(Teaches_ID,FacID,Course_ID)VALUES(1,1,12)
 INTO Teaches(Teaches_ID,FacID,Course_ID)VALUES(2,1,10)
 INTO Teaches(Teaches_ID,FacID,Course_ID)VALUES(3,3,22)
 INTO Teaches(Teaches_ID,FacID,Course_ID)VALUES(4,6,8)
 INTO Teaches(Teaches_ID,FacID,Course_ID)VALUES(5,3,20)
 INTO Teaches(Teaches_ID,FacID,Course_ID)VALUES(6,5,30)
```

INTO Teaches(Teaches_ID,FacID,Course_ID)VALUES(7,2,30)

Select * FROM dual;

	TEACHES_ID	FACID	COURSE_ID
1	1	1	12
2	2	1	10
3	3	3	22
4	4	6	8
5	5	3	20
6	6	5	30
7	7	2	30

Queries

Query#01

select * from Student where stud_id =20 or stud_age=18;

Output

	COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
1	TEACHES_ID	NUMBER	No	(null)	1	(null)
2	FACID	NUMBER	No	(null)	2	(null)
3	COURSE_ID	NUMBER	No	(null)	3	(null)

Query#02

Select * from Admin order by Admin_Name asc;

Output

	ADMIN_ID	ADMIN_NAME	EMAIL
1	4	Avril Lavign	Avril@gmail.com
2	6	Indiana Jones	Jones@gmail.com
3	1	James Bond	James@gmail.com
4	5	Justin Mahone	JM@gmail.com
5	2	Mathew Blue	MathewB@gmail.com
6	3	Smith Black	Smith@gmail.com

Query#03

Select teaches_id,Course_ID, Facid from teaches where Facid=(select facid from enroll where classid=(select class_id from classes where numberof_stud=75));

Output

	TEACHES_ID	COURSE_ID	FACID
1	3	22	3
2	5	20	3

Query#04

select Stud_name, ClassID, Parent from student where classid=(select class_id from Classes where class_name='RM-2');

Output

	STUD_NAME	CLASSID	GURADIAN	
1	Thomas Richard	11	R Michael	...

Query#05

select CourseID, ClassID from enroll where ClassID=(Select Class_ID from Classes where class_name='MD-1');

Output

	COURSEID	CLASSID
1	12	12

Query#06

Select Faculty.fac_name, class_id from course INNER JOIN Faculty ON faculty.fac_id=course.facid;

Output

	FAC_NAME	CLASSID
1	Taylor Swift	9
2	Tom Cruise	10
3	Jerry James	11
4	Jerry James	12
5	Justin Bebber	10
6	Julia Rose	13
7	Suho Paal	14

Query#07

select replace('Tom Cruise','o','O')from Faculty;

Output

	REPLACE('TOMCRUISE','O','O')
1	TOm Cruise
2	TOm Cruise
3	TOm Cruise
4	TOm Cruise
5	TOm Cruise
6	TOm Cruise

Query#08

select fac_ph.phoneno, faculty.fac_name from Faculty INNER JOIN Fac_ph ON Faculty.Fac_ID= fac_ph.facID;

Output

	PHONENO	FAC_NAME
1	322484829	Taylor Swift
2	322484234	Taylor Swift
3	234142232	Tom Cruise
4	232484829	Jerry James
5	121848224	Justin Bebber
6	323413311	Julia Rose
7	123454333	Julia Rose
8	213248482	Suho Paal