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Batch CSE-06

Branch CSE

Subject DBMS

Assignment 2 (Data Definition Languages)

STUDENT Table

(StudentID, Last, First, Street, City, State, Zip, StartTerm, BirthDate, FacultyID, MajorID, Phone);

- Creating Student Table

create table STUDENT (StudentID Number Generated By
Default AS IDENTITY, last varchar2(10),

First varchar(10),

Street varchar(10),

City varchar(10),

State varchar(10),

Zip int,

StartTerm int,

BirthDate date,

FacultyID int,
MajorID int,
Phone int);

```
SQL> desc student
```

Name	Null?	Type
-----	-----	-----
STUDENTID	NOT NULL	NUMBER
LAST		VARCHAR2(10)
FIRST		VARCHAR2(10)
STREET		VARCHAR2(10)
CITY		VARCHAR2(10)
STATE		VARCHAR2(10)
ZIP		NUMBER(38)
STARTTERM		NUMBER(38)
BIRTHDATE		DATE
FACULTYID		NUMBER(38)
MAJORID		NUMBER(38)
PHONE		NUMBER(38)

Inserting Values Into Student

Insert Into Student

VALUES('4', 'Ledwani', 'Ankit', 'Bandra', 'Mumbai', 'MH',
'400050', '2022', TO_DATE('2001-01-30', 'YYYY-MM-DD'), '126', '459', '8054327563');

```
SQL> select * from student;
```

STUDENTID	LAST	FIRST	STREET	CITY	STATE	ZIP	STARTTERM	BIRTHDATE	FACULTYID	MAJORID	PHONE
1	Gupta	Manas	Inderlok	C_Delhi	Delhi	110035	2019	13-NOV-06	125	458	8006970563
2	Ledwani	Ankit	Bandra	Mumbai	MH	400050	2022	30-JAN-01	126	459	8054327563
3	Obero	Anant	Chhavani	Indore	MP	452001	2017	15-MAY-94	127	460	9065327563
4	Gupta	Nikhil	Garhi	Dehradun	UK	248003	2020	30-APR-02	123	456	8273011131
5	Sharma	Rohan	HauzKhas	Delhi	Delhi	110016	2021	23-MAR-02	124	457	9568391020

Faculty Table

(FacultyId, Name, RoomId, Phone, DeptId);

Creating Faculty Table

Create table Faculty (facultyID Number Generated by Default as Identity); Name varchar2(10),

RoomId int, Phone int, DeptId int);

```
SQL> desc faculty;
```

Name	Null?	Type
FACULTYID	NOT NULL	NUMBER
NAME		VARCHAR2(10)
ROOMID		NUMBER(38)
PHONE		NUMBER(38)
DEPTID	NOT NULL	VARCHAR2(10)

Inserting Values Into Faculty

Insert Into Faculty values ('0001', 'HimansuDas', '101',
'9756345823', '051001');

```
SQL> select * from faculty  
2 ;
```

FACULTYID	NAME	ROOMID	PHONE	DEPTID
1	HimansuDas	101	9756345823	051001
2	Rajdeep	201	9754345823	DB2001
3	Debashish	301	8647543823	WT3001
4	Itishri	401	7641233823	BC4001
5	Manoj	501	8745633843	CA5001

COURSE Table

Creating Course Table

```
create table course (courseID, Title varchar(10), Credits  
                    varchar(10); Prereq varchar(20);  
                    PRIMARY KEY (courseID));
```

```
SQL> desc course;
```

Name	Null?	Type
-----	-----	-----
COURSEID	NOT NULL	NUMBER
TITLE		VARCHAR2(10)
CREDITS		VARCHAR2(10)
PREREQ		VARCHAR2(20)

Inserting Into Course

```
insert into course VALUES ('1001', 'WebDev', 'Angela Yu',  
                            'HTML');
```

```
SQL> select * from course;
```

COURSEID	TITLE	CREDITS	PREREQ
-----	-----	-----	-----
1001	WebDev	AngelaYu	HTML
2002	DSA	AbdulBari	C/C++
3003	Python	ColtSteele	None
4004	AI	Nikhil	Python
5005	Blockchain	Rajdeep	Solidity

CRSSECTION Table

Creating CRSSECTION Table

Create table CRSSECTION (CSID, CourseID int UNIQUE,
Section int,
TermID int,
FacultyID int,
Day varchar(10),
StartTime int,
EndTime int,
RoomID int,
MaxCount int,
CHECK (MaxCount <= 10), PRIMARY KEY (CSID));

```
SQL> desc crssection;
```

Name	Null?	Type
-----	-----	-----
CSID	NOT NULL	NUMBER
COURSEID		NUMBER(38)
SECTION		VARCHAR2(5)
TERMID		NUMBER(38)
FACULTYID		NUMBER(38)
DAY		VARCHAR2(10)
STARTTIME		VARCHAR2(10)
ENDTIME		VARCHAR2(10)
ROOMID		NUMBER(38)
MAXCOUNT		NUMBER(38)

Inserting Into CRSSECTION

Insert Into CRSSECTION VALUES('1001','1523','24',
'0122','456','Monday','8:30','9:30','101','10');

```
SQL> select * from crssection;
```

CSID	COURSEID	SECTI	TERMID	FACULTYID	DAY	STARTTIME	ENDTIME	ROOMID	MAXCOUNT
1001	1523	24	122	456	Monday	08:30	09:30	101	10
2002	1524	06	222	457	Monday	09:30	10:30	201	10
3003	1525	17	322	458	Monday	10:30	11:30	301	10
4004	1526	08	422	459	Monday	11:30	12:30	401	10
5005	1527	12	522	460	Monday	12:30	01:30	501	10

TERM Table

create table term(TermID Number Generated by Default
AS IDENTITY, TermDesc varchar(20),
StartDate date, EndDate date);

```
SQL> desc term;
```

Name	Null?	Type
TERMID	NOT NULL	NUMBER
TERMDISC		VARCHAR2(20)
STARTDATE		DATE
ENDDATE		DATE

Inserting Into TERM

Insert Into Term Values ('1001', 'MidTerm', TO-DATE('2022-01-03', 'YYYY-MM-DD'), TO-DATE('2022-06-20', 'YYYY-MM-DD'));

```
SQL> select * from term;
```

TERMID	TERMDISC	STARTDATE	ENDDATE
1001	MidTerm	03-JAN-22	20-JUN-22
2002	MidTerm	03-JAN-21	20-JUN-21
3003	FinalTerm	03-APR-22	20-JUN-21
4004	FinalTerm	03-APR-22	20-JUN-21
5005	FinalTerm	03-APR-22	20-JUN-21
6006	MidTerm	03-JAN-22	20-JUN-22

6 rows selected.

ROOM Table

create table ROOM (ROOMType varchar2(10), RoomDesc varchar2(20));

```
SQL> desc room
```

Name	Null?	Type
ROOMTYPE		VARCHAR2(10)
ROOMDESC		VARCHAR2(20)

Inserting Values Into Room

insert into room values ('AC', '3 Bed AC');

```
SQL> select * from room;
```

ROOMTYPE	ROOMDESC
----------	----------

-----	-----
-------	-------

AC	3BedAC
----	--------

NonAC	3_BedNonAC
-------	------------

NonAC	2_BedNonAC
-------	------------

NonAC	1_BedNonAC
-------	------------

AC	2_BedAC
----	---------

Registration Table

Creating Registration Table

Create table Registration (studentid, CSID int, midterm varchar(10), final varchar(10), regstatus varchar(20));

```
SQL> desc registration;
Name                               Null?      Type
-----
STUDENTID                          NOT NULL   NUMBER
CSID                               NUMBER(38)
MIDTERM                             VARCHAR2(20)
FINALREGSTATUS                     VARCHAR2(20)
```

Inserting Into Registration

Insert Into Registration values ('1005', '127', 'June', 'Rejected');

```
SQL> select * from registration;
```

STUDENTID	CSID	MIDTERM	FINALREGSTATUS
1001	123	March	Approved
1002	124	March	Rejected
1003	125	June	Approved
1004	126	June	Approved
1005	127	June	Rejected

Department Table

Creating Department Table

Create table department (DeptID Number Generated By
Default As Identity, DeptName varchar(20), FacultyID int
UNIQUE);

```
SQL> desc department
Name                Null?      Type
-----
DEPTID              NOT NULL  NUMBER
DEPTNAME                        VARCHAR2(20)
FACULTYID                        NUMBER(38)
```

Inserting Into Department

Insert into department values ('1001', 'Maths', '1523');

```
SQL> select * from department;

DEPTID DEPTNAME          FACULTYID
-----
1001 Maths              1523
2002 DSA                1524
3003 DBMS              1525
4004 OOP               1526
5005 OS                1527
```

Major Table

Creating Major Table

create table Major (MajorID NUMBER GENERATED BY
DEFAULT AS IDENTITY, MajorDesc varchar2(20));

```
SQL> desc major
```

Name	Null?	Type
MAJORID	NOT NULL	NUMBER
MAJORDESC		VARCHAR2(20)

Inserting Into Major Table

Insert into Major Values ('1001', 'DSA');

```
SQL> select * from major;
```

MAJORID	MAJORDESC
1001	DSA
2002	OOP
3003	JAVA
4004	OS
5005	DBMS

Location Table

Creating Location Table

Create table Location(RoomID Number Generated by Default As Identity, Building varchar(20), RoomNo int, Capacity int, RoomType varchar(20), check (capacity <= 3));

```
SQL> desc location;
Name                               Null?   Type
-----
ROOMID                             NOT NULL NUMBER
BUILDING                           VARCHAR2(20)
ROOMNO                              NUMBER(38)
CAPACITY                           NUMBER(38)
ROOMTYPE                           VARCHAR2(20)
```

Insert Into Location Table

insert into Location values ('1001', 'WingA', '601', '3', 'AC');

```
SQL> select * from location;

ROOMID BUILDING          ROOMNO  CAPACITY ROOMTYPE
-----
1001 WingA              601      3 AC
2002 WingB              501      2 NonAC
3003 WingC              401      1 AC
4004 WingD              301      3 NonAC
5005 WingE              201      2 NonAC
```

Employee Table

Create table employee (EmployeeID int, Lname varchar(20),
Fname varchar(20), PositionID int, Supervisor varchar2(20),
HireDate date, Salary int, Commission int, DeptID int,
QualID varchar(20), PRIMARY KEY (EmployeeID));

```
SQL> desc employee;
```

Name	Null?	Type
EMPLOYEEID	NOT NULL	NUMBER(38)
LNAME		VARCHAR2(20)
FNAME		VARCHAR2(20)
POSITIONID		NUMBER(38)
SUPERVISOR		VARCHAR2(20)
HIREDATE		DATE
SALARY		NUMBER(38)
COMMISSION		NUMBER(38)
DEPTID		NUMBER(38)
QUALID		VARCHAR2(20)

Insert Into Employee

Insert Into employee values ('1001', 'Gupta', 'Nikhil', '0001',
'Rohan', 'TO-DATE('2020-04-30', 'YY YY-MM-DD)', '56000',
'10000', '1523', '1234');

```
SQL> select * from employee;
```

EMPLOYEEID	LNAME	FNAME	POSITIONID	SUPERVISOR	HIREDATE	SALARY	COMMISSION	DEPTID	QUALID
1001	Gupta	Nikhil	1	Rohan	30-APR-20	61600	10000	1001	1234
2002	Sharma	Rohan	2	Manas	12-FEB-19	30000	5000	2002	1254
3003	Ledwani	Rahul	2	Priyanshu	23-APR-21	45000	5000	3003	1255
4004	Kapoor	Vedika	4	Avantika	25-JUN-18	65000	8000	4004	1256
5005	Sanon	Kriti	4	Anupriya	21-JUL-18	42000	0	5005	1257

Position Table

Creating Position Table

create table position(positionID int, PosDesc varchar(20),
PRIMARY KEY (positionID));

```
SQL> desc position
Name                          Null?     Type
-----
POSITIONID                    NOT NULL  NUMBER(38)
POSDESC                        VCHAR2(20)
```

Inserting Into Position Table

insert into position values('1001', 'CEO');

```
SQL> select * from position;
```

```
POSITIONID POSDESC
```

```
-----
1001 CEO
```

```
2002 MD
```

```
3003 SD
```

```
4004 HR
```

```
5005 Manager
```

DEPT Table

Creating Dept Table

Create table dept(deptID int, DeptName varchar(20), location varchar2(20), EmployeeID varchar(20), PRIMARY KEY (DEPTID));

```
SQL> desc dept;
```

Name	Null?	Type
DEPTID	NOT NULL	NUMBER(38)
DEPTNAME		VARCHAR2(20)
LOCATION		VARCHAR2(20)
EMPLOYEEID		VARCHAR2(20)

Insert Into Dept Table

insert into dept values('1101', 'CSE', 'KIIT', '1001');

```
SQL> select * from dept;
```

DEPTID	DEPTNAME	LOCATION	EMPLOYEEID
1101	CSE	KIIT	1001
2202	MCH	KIIT	2002
3303	ETH	KIIT	3003
4404	ETC	KIIT	4004
5505	CSE	KIIT	5005

Qualification Table

Creating Qualification

create table qualification ~~values~~ (QualID int, QualDesc
varchar(20), PRIMARY KEY (QualID));

```
SQL> desc qualification;
Name                Null?   Type
-----
QUALID              NOT NULL  NUMBER(38)
QUALDESC                        VARCHAR2(20)
```

Insert Into Qualification

insert into qualification values ('1234', 'Graduation');

```
SQL> select * from qualification;

   QUALID  QUALDESC
-----
    1234  Graduation
    1254    PhD
    1255 HighSchool
    1256  Masters
    1257  Bachelor
```


EMPLEVEL

Creating EMPELVEL

create table EMPELVEL (LevelNo int, LowSalary int, HighSalary int);

```
SQL> desc emplevel;
```

Name	Null?	Type
LEVELNO		NUMBER(38)
LOWSALARY		NUMBER(38)
HIGHSALARY		NUMBER(38)

Insert Into EMPELVEL Table

insert into EMPELVEL values('1', '30000', '60000');

```
SQL> select * from emplevel
```

```
2 ;
```

LEVELNO	LOWSALARY	HIGHSALARY
1	30000	60000
2	25000	55000
3	20000	50000
4	15000	45000
5	10000	40000

DEPENDENT Table

Creating Table Dependent

Create table dependent (EmployeeID int, DependentID int,
DepDOB date, Relation varchar(20), PRIMARY KEY (EmployeeID,

```
SQL> desc dependent
```

Name	Null?	Type
EMPLOYEEID	NOT NULL	NUMBER(38)
DEPENDENTID		NUMBER(38)
DEPDOB		DATE
RELATION		VARCHAR2(20)

Insert Into Dependent Table

insert into dependent values ('1001', '1', TO-DATE('2018-02-19', 'YYYY-MM-DD'), 'Spouse');

```
SQL> select * from dependent;
```

EMPLOYEEID	DEPENDENTID	DEPDOB	RELATION
1001	1	19-FEB-18	Spouse
2002	2	04-FEB-17	Daughter
3003	3	04-MAY-16	Son
4004	4	23-JUN-21	Son
5005	5	12-JUN-20	Son