DBMS ASSIGNMENT 2

Name- Arpan Agarwal Course- Btech-CS

Section- C

Roll No. 14

Univ. Rollno.- 2215000343

Department:

create table department (deptno number(3) primary key,

dname varchar(20) unique,

location varchar(20) not null,

CONSTRAINT location CHECK(location='Delhi'OR location='Pune'OR location='Agra'));

Employee:

create table employee (empno varchar(5) primary key CONSTRAINT empno CHECK(empno like'E%'),

ename varchar(20) unique,

designation varchar(20) not null,

Salary number(10) default 25000 CONSTRAINT salary CHECK(salary BETWEEN 15000 and 50000),

dob date not null,

dno number(3) references department);

Candidate:

create table candidate(Candidate\_ID number(6) primary key,

Candidate\_Name varchar(20) not null,

Candidate\_Email varchar(30) unique CONSTRAINT Candidate\_Email CHECK(Candidate\_Email like '%@.%' ),

Candidate\_Dept varchar(2) default 'HR',

Manager\_ID number(6) CONSTRAINT Manager\_ID CHECK (Candidate\_ID IS NULL OR Manager\_ID IN (SELECT DISTINCT Candidate\_ID FROM CANDIDATE))

);

2.CREATE TABLE COLLEGE,STUDENT,APPLY

CREATE TABLE COLLEGE(cname varchar(10),

state varchar2(10),

enrollment int);

CREATE TABLE Student (sID int,

sName varchar2(10),

GPA number(2,1),

sizeHS int);

CREATE TABLE Apply (sID int,

cName varchar2(10),

major varchar2(20));

WRITE THE QUERIES OF THE FOLLOWING:

1. Add cName as Primary key in College.

ALTER TABLE COLLEGE ADD primary key(cname);

1. Add sID as Primary key in Student.

ALTER TABLE STUDENT ADD Primary key(sid);

1. Add sID, cName, major as Primary key in Apply.

ALTER TABLE APPLY ADD PRIMARY KEY(SID,CNAME,MAJOR);

1. Make sID in Apply foreign key referring table student and cName referring table college.

ALTER TABLE APPLY ADD CONSTRAINT SID FOREIGN KEY (SID) REFERENCES STUDENT;

ALTER TABLE APPLY ADD CONSTRAINT CNAME FOREIGN KEY (CNAME) REFERENCES COLLEGE;

1. Increase data type size of major from 20 to 25.

ALTER TABLE apply MODIFY major VARCHAR(25);

1. Add a new column decision in the Apply table keeping a constraint of not null for this column with data type varchar2(3).

ALTER TABLE APPLY ADD DECISION VARCHAR(3) NOT NULL;

1. Change data type of decision in Apply to char(1).

ALTER TABLE APPLY MODIFY DECISION CHAR(1);

1. Drop foreign key on column name cName from Apply table.

ALTER TABLE APPLY DROP CONSTRAINT CNAME;

1. Remove column sizeHS from Student table.

ALTER TABLE STUDENT DROP COLUMN SIZEHS;

1. Drop primary key from College.

ALTER TABLE COLLEGE DROP PRIMARY KEY;

1. Make cName, major unique pairwise such as Stanford CS, Stanford EE.

ALTER TABLE APPLY ADD CONSTRAINT CMAJOR UNIQUE(CNAME,MAJOR);

1. Add cName as Foreign Key in Apply table referring table College using on delete cascade.

ALTER TABLE APPLY ADD CONSTRAINT CNAME FOREIGN KEY (CNAME) REFERENCES COLLEGE ON DELETE CASCADE;

1. Modify foreign key on sID in Apply table to foreign key on delete set null.

ALTER TABLE Apply DROP CONSTRAINT SID;

ALTER TABLE APPLY ADD CONSTRAINT SID FOREIGN KEY (SID) REFERENCES STUDENT ON DELETE SET NULL;

1. Rename column enrollment to enroll in College Table.

ALTER TABLE COLLEGE RENAME COLUMN ENROLLMENT TO ENROLL;