

# GLA UNIVERSITY , MATHURA



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12-B Status from UGC

Name : **ISHU AGRAWAL**

Section : **CA**

Roll No. : **24**

University Roll No. : **2315510088**

Course : **BTECH. CS ( AIML & IOT )**

Subject : **DATABASE MANAGEMENT SYSTEM LAB**

Subject Code : **CSE3083**

Assignment : **02**

Faculty : **MR. SURENDRA KUMAR**

## 1. Add cName as Primary key in College.

Ans. Alter table college add primary key(cName);

#	Column	Type	Length	Precision	Scale	Nullable	Semantics	Comment
1	CNAME	VARCHAR2	10			No	Byte	
2	STATE	VARCHAR2	20			Yes	Byte	
3	ENROLLMENT	NUMBER	22		0	Yes		

Constraints									
Constraint	Type	Condition	Related Constraint	Related Table	Constraint Columns	On Delete	Status	Last Change	Invalid?
SYS_C00146874241	Primary Key	-	-	-	CNAME	-	ENABLED	76 seconds ago	-

## 2. Add sID as Primary key in Student.

Ans. Alter table student add primary key(sID);

#	Column	Type	Length	Precision	Scale	Nullable	Semantics	Comment
1	SID	NUMBER	22		0	No		
2	SNAME	VARCHAR2	10			Yes	Byte	
3	GPA	NUMBER	22	2	1	Yes		
4	SIZEHS	NUMBER	22		0	Yes		

Constraints									
Constraint	Type	Condition	Related Constraint	Related Table	Constraint Columns	On Delete	Status	Last Change	Invalid?
SYS_C00146875703	Primary Key	-	-	-	SID	-	ENABLED	109 seconds ago	-

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

Ans. Alter table apply add primary key(sID,cName,major);

#	Column	Type	Length	Precision	Scale	Nullable	Semantics	Comment
1	SID	NUMBER	22		0	No		
2	CNAME	VARCHAR2	10			No	Byte	
3	MAJOR	VARCHAR2	20			No	Byte	

#### Constraints

Constraint	Type	Condition	Related Constraint	Related Table	Constraint Columns	On Delete	Status	Last Change	Invalid?
SYS_C00146875787	Primary Key	-	-	-	SID, CNAME, MAJOR	-	ENABLED	42 seconds ago	-

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

Ans. Alter table apply add constraint aID foreign key(sID) references student(sID);

Alter table apply add constraint aname foreign key(cName) references college(cName);

#	Column	Type	Length	Precision	Scale	Nullable	Semantics	Comment
1	SID	NUMBER	22		0	No		
2	CNAME	VARCHAR2	10			No	Byte	
3	MAJOR	VARCHAR2	20			No	Byte	

#### Constraints

Constraint	Type	Condition	Related Constraint	Related Table	Constraint Columns	On Delete	Status	Last Change	Invalid?
SYS_C00146876334	Foreign Key	-	SYS_C00146875703	STUDENT	SID	NO ACTION	ENABLED	2 minutes ago	-
SYS_C00146876454	Foreign Key	-	SYS_C00146874241	COLLEGE	CNAME	NO ACTION	ENABLED	54 seconds ago	-

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

Ans. Alter table apply modify major varchar(25);

Column	Null?	Type
SID	NOT NULL	NUMBER
CNAME	NOT NULL	VARCHAR2(10)
MAJOR	NOT NULL	VARCHAR2(25)

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

Ans. Alter table apply add decision varchar(3) not null;

Column	Null?	Type
SID	NOT NULL	NUMBER
CNAME	NOT NULL	VARCHAR2(10)
MAJOR	NOT NULL	VARCHAR2(25)
DECISION	NOT NULL	VARCHAR2(3)

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

Ans. Alter table apply modify decision char(1);

Column	Null?	Type
SID	NOT NULL	NUMBER
CNAME	NOT NULL	VARCHAR2(10)
MAJOR	NOT NULL	VARCHAR2(25)
DECISION	NOT NULL	CHAR(1)

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

Ans. Alter table apply drop foreign key aname;

Constraints									
Constraint	Type	Condition	Related Constraint	Related Table	Constraint Columns	On Delete	Status	Last Change	Invalid?
AID	Foreign Key	-	SYS_C00146950648	STUDENT	SID	NO ACTION	ENABLED	17 minutes ago	-
PID	Primary Key	-	-	-	SID, CNAME, MAJOR	-	ENABLED	19 minutes ago	-

9. Remove column sizeHS from Student table.

Ans. alter table student drop column sizeHS;

Column	Null?	Type
SID	NOT NULL	NUMBER
SNAME	-	VARCHAR2(10)
GPA	-	NUMBER(2,1)

10. Drop primary key from College.

Ans. alter table college drop primary key;

Columns								
 Copy Query								
#	Column	Type	Length	Precision	Scale	Nullable	Semantics	Comment
1	CNAME	VARCHAR2	10			Yes	Byte	
2	STATE	VARCHAR2	10			Yes	Byte	
3	ENROLLMENT	NUMBER	22		0	Yes		
Constraints								
No constraints defined.								

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

Ans. alter table apply add constraint amajor unique(cName , major);

Constraints									
Constraint	Type	Condition	Related Constraint	Related Table	Constraint Columns	On Delete	Status	Last Change	Invalid?
SYS_C00146952714	Check	"DECISION" IS NOT NULL	-	-	-	-	ENABLED	120 seconds ago	-
AID	Foreign Key	-	SYS_C00146950648	STUDENT	SID	NO ACTION	ENABLED	4 minutes ago	-
SYS_C00146952757	Primary Key	-	-	-	SID, CNAME, MAJOR	-	ENABLED	25 seconds ago	-
AMAJOR	Unique Key	-	-	-	CNAME, MAJOR	-	ENABLED	3 minutes ago	-

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

Ans. Alter table apply add constraint aname foreign key(cName) references college(cName) on delete cascade;

Constraints									
Constraint	Type	Condition	Related Constraint	Related Table	Constraint Columns	On Delete	Status	Last Change	Invalid?
SYS_C00147007684	Check	"DECISION" IS NOT NULL	-	-	-	-	ENABLED	64 minutes ago	-
AID	Foreign Key	-	SYS_C00147008806	STUDENT	SID	NO ACTION	ENABLED	14 minutes ago	-
ANAME	Foreign Key	-	SYS_C00147008723	COLLEGE	CNAME	CASCADE	ENABLED	37 seconds ago	-
SYS_C00147009148	Primary Key	-	-	-	SID, CNAME, MAJOR	-	ENABLED	8 minutes ago	-
AMAJOR	Unique Key	-	-	-	CNAME, MAJOR	-	ENABLED	17 minutes ago	-

13. Modify foreign key on SID in Apply table to foreign key on delete set null.

Ans. Alter table apply modify constraint aID foreign key(SID) references student(SID) on delete set null;

Constraints									
Constraint	Type	Condition	Related Constraint	Related Table	Constraint Columns	On Delete	Status	Last Change	Invalid?
SYS_C00147007684	Check	"DECISION" IS NOT NULL	-	-	-	-	ENABLED	67 minutes ago	-
AID	Foreign Key	-	SYS_C00147008806	STUDENT	SID	SET NULL	ENABLED	7 seconds ago	-
ANAME	Foreign Key	-	SYS_C00147008723	COLLEGE	CNAME	CASCADE	ENABLED	3 minutes ago	-
SYS_C00147009148	Primary Key	-	-	-	SID, CNAME, MAJOR	-	ENABLED	11 minutes ago	-
AMAJOR	Unique Key	-	-	-	CNAME, MAJOR	-	ENABLED	19 minutes ago	-

14. Rename column enrollment to enroll in College Table.

Ans. Alter table college rename column enrollment to enroll;

Column	Null?	Type
CNAME	-	VARCHAR2(10)
STATE	-	VARCHAR2(10)
ENROLL	-	NUMBER