**Assignment 3**

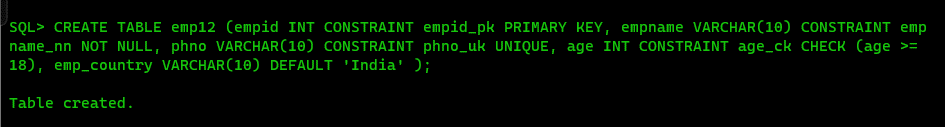
Name :- Bibek Chand Sah

Roll No. :- 22054029

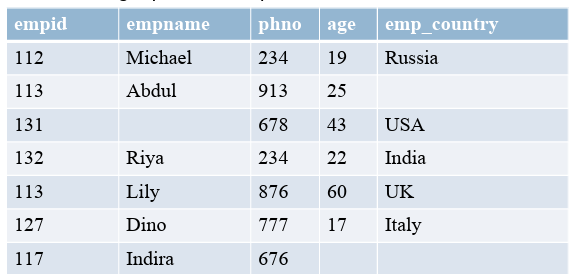
Section :- CSE-05

1. Create a tabme emp12, with attributes empid, empname, phno, age, and emp\_country. Make emp id the primary key of the table. Make empname not null, phno unique and put a check constraint on age which make sure employees are not below 18. Put a default value “India” on emp\_country.

🡺 CREATE TABLE emp12 (empid INT CONSTRAINT empid\_pk PRIMARY KEY, empname VARCHAR(10) CONSTRAINT empname\_nn NOT NULL, phno VARCHAR(10) CONSTRAINT phno\_uk UNIQUE, age INT CONSTRAINT age\_ck CHECK (age >= 18), emp\_country VARCHAR(10) DEFAULT 'India' );



2. Insert the following tuples into emp12 table.



🡺 INSERT INTO emp12 VALUES (&empid, '&empname', '&phno', &age, '&emp\_country');

ALTER TABLE emp12 DROP CONSTRAINT empname\_nn;

ALTER TABLE emp12 DROP CONSTRAINT phno\_uk;

ALTER TABLE emp12 DROP CONSTRAINT empid\_pk;

ALTER TABLE emp12 DROP CONSTRAINT age\_ck;

A computer screen with green text

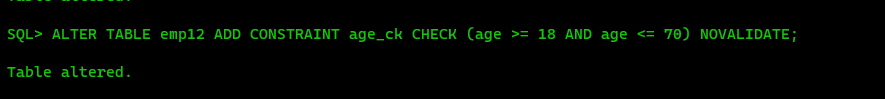
Description automatically generated

3. Drop the check constraint on age.

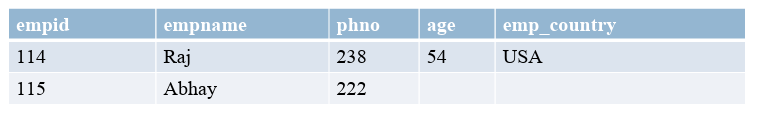
🡺 ALTER TABLE emp12 DROP CONSTRAINT age\_ck;

4. Put a default constraint with value 18 on age along with a check constraint which ensures age value is greater than or equal to 18 and less than or equal to 70.

🡺 ALTER TABLE emp12 ADD CONSTRAINT age\_ck CHECK (age >= 18 AND age <= 70) NOVALIDATE;



5. Insert the following rows in the emp12 table.

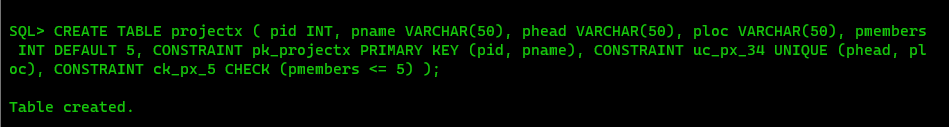
🡺 INSERT INTO emp12 VALUES (&empid, '&empname', '&phno', &age, '&emp\_country');

A computer screen with green text

Description automatically generated

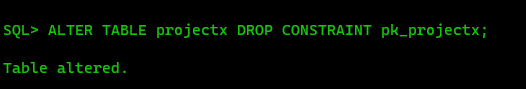
6. Create table projectx with attributes pid, pname, phead, ploc and pmembers. pmembers should have a default value of 5. Make (pid,pname) the primary key. Use a constraint named uc\_px\_34 to make phead and ploc unique. Put a check constraint named ck\_px\_5 on pmembers which ensures that the number of pmembers must not exceed 5.

🡺 CREATE TABLE projectx ( pid INT, pname VARCHAR(50), phead VARCHAR(50), ploc VARCHAR(50), pmembers INT DEFAULT 5, CONSTRAINT pk\_projectx PRIMARY KEY (pid, pname), CONSTRAINT uc\_px\_34 UNIQUE (phead, ploc), CONSTRAINT ck\_px\_5 CHECK (pmembers <= 5) );



7. Drop the primary key of the projectx table.

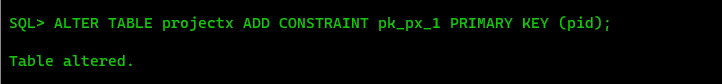
🡺 ALTER TABLE projectx DROP CONSTRAINT pk\_projectx;



8. Put a constraint named pk\_px\_1 on pid, making pid the primary key of the table.

🡺 ALTER TABLE project DROP CONSTRAINT pk\_projectx;

ALTER TABLE projectx ADD CONSTRAINT pk\_px\_1 PRIMARY KEY (pid);



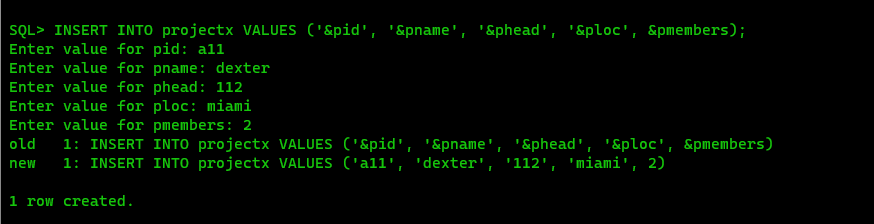
9. Insert the following rows in projectx table.

A table with numbers and letters

Description automatically generated

🡺 ALTER TABLE projectx MODIFY pid varchar2(10);

INSERT INTO projectx VALUES ('&pid', '&pname', '&phead', '&ploc', &pmembers);



10. Delete all rows from emp12 table except the rows having primary keys (112, 113, 114).

🡺 DELETE FROM emp12 WHERE empid NOT IN (112, 113, 114);

A black screen with green text

Description automatically generated

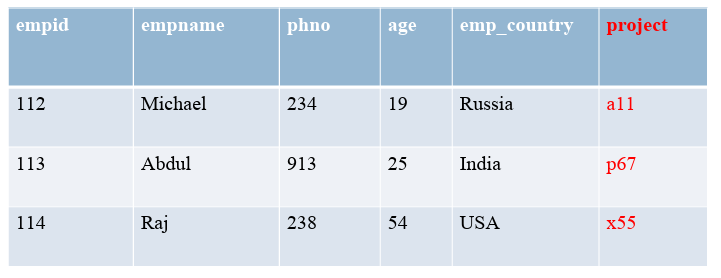
11. Insert a colunm named project in the emp12 table.

🡺 ALTER TABLE emp12 ADD project VARCHAR(10);

A black background with green text

Description automatically generated

12. Update the table as following.



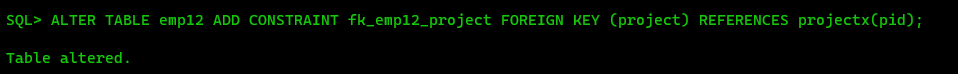
🡺 INSERT INTO emp12 VALUES (&empid, '&empname', '&phno', &age, '&emp\_country', '&project');

A screen shot of a computer

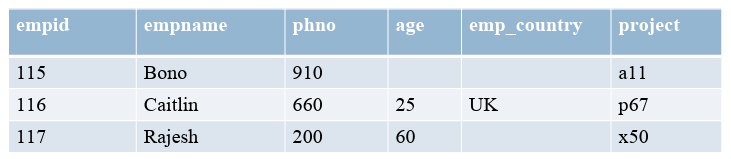
Description automatically generated

13. Make the project attribute of the emp12 table a foreign key that links it to the pid attribute of the projectx table.

🡺 ALTER TABLE emp12 ADD CONSTRAINT fk\_emp12\_project FOREIGN KEY (project) REFERENCES projectx(pid);



14. Insert the following tuples in the emp12 table.



🡺 INSERT INTO emp12 VALUES (&empid, '&empname', '&phno', &age, '&emp\_country', '&project');

ALTER TABLE emp12 DROP CONSTRAINT FK\_EMP12\_PROJECT;

A black screen with green text

Description automatically generated

15. Make the phead attribute of the projectx table a foreign key that links it to the empid attribute of the emp12 table.

🡺 ALTER TABLE project ADD CONSTRAINT fk\_projectx\_emp12 FOREIGN KEY (phead) REFERENCES emp12(empid);

ADD CONSTRAINT CFK FOREIGN KEY(PHEAD) REFERENCES EMP12(EMPID);

ALTER TABLE EMP12 MODIFY EMPID NUMBER PRIMARY KEY

Relation can’t be established until there are duplicate EMPIDs. Hence,

Delete duplicate empids (I.e Lily)

DELETE FROM EMP12 WHERE EMPNAME = 'Lily';

Make empid primary key

ALTER TABLE EMP12 MODIFY EMPID NUMBER PRIMARY KEY;

Create relation :

ALTER TABLE project ADD CONSTRAINT fk\_phead\_emp12 FOREIGN KEY (phead) REFERENCES emp12(empid);

16. Display all the constraints there are in emp12 table.

🡺 SELECT constraint\_name, constraint\_type, table\_name FROM all\_constraints WHERE table\_name = 'EMP12';

17. Drop all the constraints in emp12 table one by one.

🡺 ALTER TABLE emp12 DROP CONSTRAINT pk\_px\_1;

ALTER TABLE emp12 DROP CONSTRAINT uc\_px\_34;

ALTER TABLE emp12 DROP CONSTRAINT ck\_px\_5;

18. Make emp\_id the primary key of the employee table (of assignment 2).

🡺 ALTER TABLE employee ADD CONSTRAINT pk\_employee PRIMARY KEY (emp\_id);

19. Make the dept attribute of the employee table a foreign key refering to the department table (of assignment 2).

🡺 ALTER TABLE employee ADD CONSTRAINT fk\_employee\_department FOREIGN KEY (dept) REFERENCES department(dept\_id);

20. Make d\_name the primary key of the department table (of assignment 2).

🡺 ALTER TABLE department ADD CONSTRAINT pk\_department PRIMARY KEY (d\_name);

21. Make the dept attribute of the employee table a foreign key refering to the d\_name attribute of the department table (of assignment 2)

🡺 ALTER TABLE employee ADD CONSTRAINT fk\_employee\_department FOREIGN KEY (dept) REFERENCES department(d\_name);