CS687 DATABASE PROJECT 1

TEAM MEMBERS:

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3. CODE TO CREATE THE DATABASE AND TABLES

#include <stdio.h>

EXEC SQL INCLUDE sqlca;

EXEC SQL WHENEVER SQLERROR sqlprint;

int main()

{

EXEC SQL BEGIN DECLARE SECTION;

char \*username= "psql cs687 pg0018";

char \*password= "f16687";

EXEC SQL END DECLARE SECTION;

EXEC SQL CONNECT TO unix:postgresql://localhost /cs687 USER pg0018 USING "f16687";

if (sqlca.sqlcode < 0) exit(-1);

printf("CONNECTED\n");

EXEC SQL CREATE SCHEMA ADAMBYREGOWDA;

EXEC SQL CREATE TABLE ADAMBYREGOWDA.EMPLOYEE (

Fname VARCHAR(15) NOT NULL,

Minit CHAR,

Lname VARCHAR(15) NOT NULL,

Ssn CHAR(9) NOT NULL,

Bdate DATE,

Address VARCHAR(30),

Sex CHAR,

Salary DECIMAL(10,2),

Super\_ssn CHAR(9),

Dno INT NOT NULL DEFAULT 1,

PRIMARY KEY (Ssn)

);

EXEC SQL CREATE TABLE ADAMBYREGOWDA.DEPARTMENT

(

Dname VARCHAR(15) NOT NULL,

Dnumber INT NOT NULL,

Mgr\_ssn CHAR(9) NOT NULL,

Mgr\_start\_date DATE,

PRIMARY KEY (Dnumber),

UNIQUE (Dname),

FOREIGN KEY (Mgr\_ssn) REFERENCES ADAMBYREGOWDA.EMPLOYEE(Ssn)

);

EXEC SQL CREATE TABLE ADAMBYREGOWDA.DEPT\_LOCATIONS

(

Dnumber INT NOT NULL,

Dlocation VARCHAR(15) NOT NULL,

PRIMARY KEY (Dnumber, Dlocation),

FOREIGN KEY (Dnumber) REFERENCES ADAMBYREGOWDA.DEPARTMENT(Dnumber)

);

EXEC SQL CREATE TABLE ADAMBYREGOWDA.PROJECT

(

Pname VARCHAR(15) NOT NULL,

Pnumber INT NOT NULL,

Plocation VARCHAR(15),

Dnum INT NOT NULL,

PRIMARY KEY (Pnumber),

UNIQUE (Pname),

FOREIGN KEY (Dnum) REFERENCES ADAMBYREGOWDA.DEPARTMENT(Dnumber)

);

EXEC SQL CREATE TABLE ADAMBYREGOWDA.WORKS\_ON

(

Essn CHAR(9) NOT NULL,

Pno INT NOT NULL,

Hours DECIMAL(3,1) NOT NULL,

PRIMARY KEY (Essn, Pno),

FOREIGN KEY (Essn) REFERENCES ADAMBYREGOWDA.EMPLOYEE(Ssn),

FOREIGN KEY (Pno) REFERENCES ADAMBYREGOWDA.PROJECT(Pnumber)

);

EXEC SQL CREATE TABLE ADAMBYREGOWDA.DEPENDENT

(

Essn CHAR(9) NOT NULL,

Dependent\_name VARCHAR(15) NOT NULL,

Sex CHAR,

Bdate DATE,

Relationship VARCHAR(8),

PRIMARY KEY (Essn, Dependent\_name),

FOREIGN KEY (Essn) REFERENCES ADAMBYREGOWDA.EMPLOYEE(Ssn)

);

if(sqlca.sqlcode>=0)

printf("Successful\n");

else

printf("Not Successful\n");

EXEC SQL COMMIT;

EXEC SQL DISCONNECT;

return 0;

1. THE INSERTED TUPLES VALUES THROUGH THE SELECT \* FROM <TABLE NAME> OPERATIONS











