

Database Systems Project Report

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A- Introduction

A database is being constructed to keep track of a software company's data. The Company develops software products for example (applications, middleware, and operating systems...). There are many departments in the software company. Every department has a manager and many employees working for it. A department can be responsible for many projects. The employees in the company can be accountants, secretaries, technicians, and engineers. Engineers work on projects. An employee must be a salaried employee or an hourly employee. The company gives a manager a car and an office. The database also keeps track of every employee's name, birthdate, address... as well as every department name, location, number....



B- Important data and reports

Software_Company: Company_Name, Address, PhoneNumber.

Software_Product: Product_ID, Product_Name, Company_Name.

Application: Product_ID, PlateForm_Type.

Operating_Systems: Product_ID, OS_Type.

Department: Department_Number, Department_Name, Number_Of_Employees, Company_Name, Mgr_SSN, Start_date.

Dept_Location: Department_Number, DLocation.

Employee: Employee_SSN, Bdate, Fname, Mname, Lname, Address, Gender, Company_Name, Department_Number, Super-SSN.

Dependent: Employee_SSN, Department_Number, Gender, Relationship, Bdate.

Office: OfficeNo, Office_Location.

Manager: Manager_SSN, Title, OfficeNo.

Car: LicensePlateNo, CModel, CMake, CStyle, CYear, Manager_SSN.

Engineer: ENG_SSN, ENG_Type.

Project: Pnumber, PName, Department_Number.

Works_On: ENG_SSN, Pnumber, Hours.

Accountant: ACC_SSN, Type.

Secretary: SEC_SSN, Typing_Speed.

Technicians: TECH_SSN, Tgrade.

Salaried_Employee: Employee_SSN, Salary.

Trade_Union: Union_Name.

Hourly_Employee: Employee_SSN, Pay_Scale, Union_Name.

Reports:

- Retrieve the first name, last name, birthday date, and address of the employees and order them by their first name.
- Retrieve the hours and the ssn of the engineer with the maximum work hours
- Retrieve the ssn of employees that either work on a project or manages a department
- Retrieve the first name of each employee who has a dependent Whose Bdate in the 80's, the name of the dependent and their relationship and the Bdate of the dependent
- Retrieve the Project number, Project name, and the managing department number of the projects with location Roxy, also retrieve the name and ssn of the employees that manage those departments

C- Assumptions

Relationships:

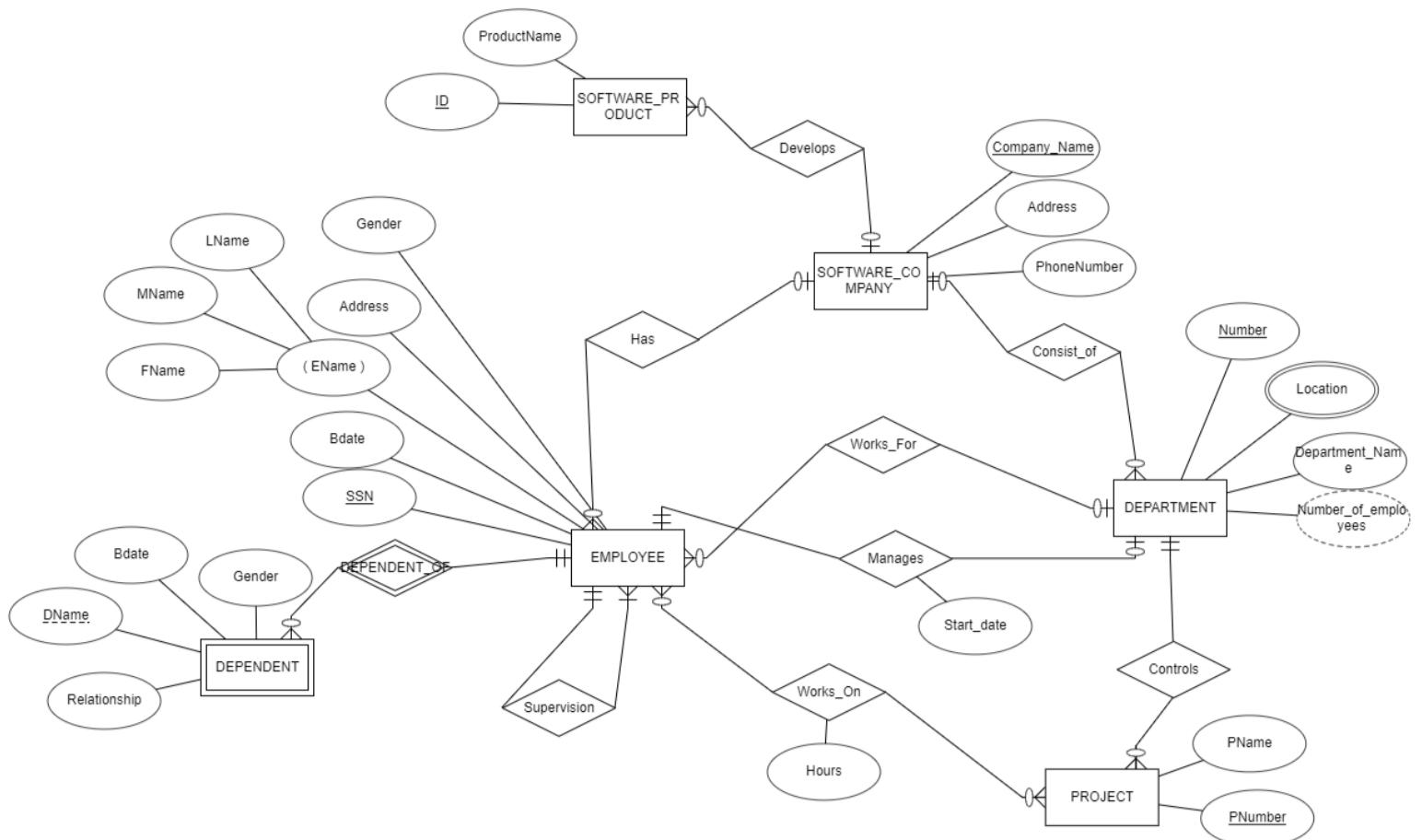
- The software company has to develop at least one software product.
- The software product has to be developed by one company.
- Software product can be an application, middleware, operating system, etc. This specialization is overlapping that is the same entity may be a member of more than one subclass and is partial which allows the entity not to belong to any of the subclasses.
- Software company consists of at least 1 department up to N departments.
- Each department has to have 1 company.
- Software company has at least 1 employee up to N.
- Each employee has only 1 company.
- Each department has to have at least 1 employee.
- Each employee may work for 1 department.
- An employee may manage 1 department.
- A department has to be managed by 1 manager.
- A manger may be given a car.
- Each car has to be given to a manager.
- A department may control M projects.
- Each project has to be controlled by 1 department.
- Each employee may supervise N employees.
- Each employee may be supervised by one employee.
- Employees may be one of Accountant, Secretary, Technician, Engineer.
- An engineer has to work on at least 1 project.
- Each project has to have at least 1 employee working on it (up to M).
- Each employee is either a salaried employee, or an hourly employee.
- An hourly employee has to belong to 1 trade union.

- Each trade union has at least 1 hourly employee (up to M).
- Each employee may have N dependents.
- Each dependent has to be a dependent of at least 1 employee (this is a weak relation as once the employee leaves his dependents are removed from the system).

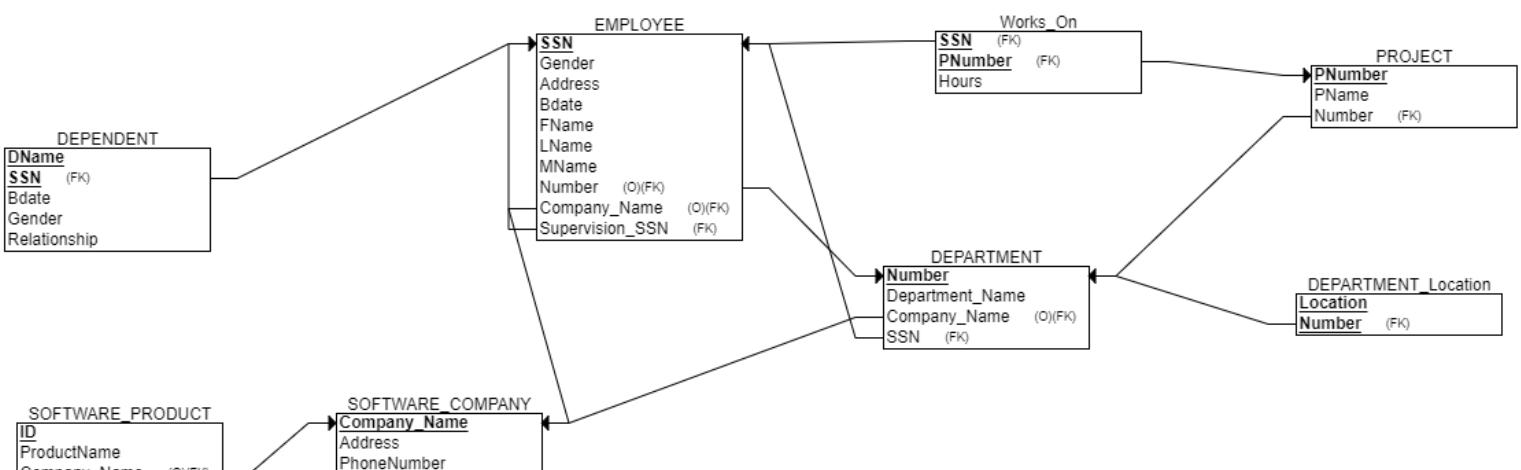
Attributes:

- The software company has a company name (key), an address and a phone number.
- Each product has a name and an ID .
- Each application has a version.
- Each middleware has a plateForm_Type.
- Each operating system has a OS type.
- Each department has a number (key) a location (multivalue attribute), a department name and number of employees(calculated).
- Each project has a name and a number (key),location.
- Each manages relation has a start date (when did the manager start).
- Each car has a licensePlateNo (key), a Model, maker, style, year.
- Each works on relation has an attribute hour that is the number of hours this engineer will work on this project.
- Each employee has gender, address, a name(that is made of first name, middle name, last name), a birth date, a SSN(key).
- Each accountant has a type.
- Each secretary has a typing speed.
- Each technician has a grade.
- Each engineer has a type.
- Each salaried employee has a salary.
- Each hourly employee has a pay scale.
- Each trade union has a name (key).
- Each dependent has a birth date, relationship, gender, name(key).

D- ER diagram



E- Relational data model



F- SQL sample

```
CREATE TABLE SOFTWARE_COMPANY
(
    Company_Name INT NOT NULL,
    Address INT NOT NULL,
    PhoneNumber INT NOT NULL,
    PRIMARY KEY (Company_Name)
);

CREATE TABLE SOFTWARE_PRODUCT
(
    ProductName INT NOT NULL,
    ID INT NOT NULL,
    Company_Name INT,
    PRIMARY KEY (ID),
    FOREIGN KEY (Company_Name) REFERENCES SOFTWARE_COMPANY(Company_Name)
);

CREATE TABLE DEPENDENT
(
    Bdate INT NOT NULL,
    Gender INT NOT NULL,
    DName INT NOT NULL,
    Relationship INT NOT NULL,
    SSN INT NOT NULL,
    PRIMARY KEY (DName, SSN),
    FOREIGN KEY (SSN) REFERENCES EMPLOYEE(SSN)
);

CREATE TABLE EMPLOYEE
(
    Gender INT NOT NULL,
    Address INT NOT NULL,
    Bdate INT NOT NULL,
    SSN INT NOT NULL,
    FName INT NOT NULL,
    LName INT NOT NULL,
    MName INT NOT NULL,
    Number INT,
    Company_Name INT,
    Supervision_SSN INT NOT NULL,
    PRIMARY KEY (SSN),
    FOREIGN KEY (Number) REFERENCES DEPARTMENT(Number),
    FOREIGN KEY (Company_Name) REFERENCES SOFTWARE_COMPANY(Company_Name),
    FOREIGN KEY (Supervision_SSN) REFERENCES EMPLOYEE(SSN)
);
```

```

CREATE TABLE DEPARTMENT
(
    Department_Name INT NOT NULL,
    Number INT NOT NULL
)
CREATE TABLE DEPARTMENT
(
    Department_Name INT NOT NULL,
    Number INT NOT NULL,
    Company_Name INT,
    SSN INT NOT NULL,
    PRIMARY KEY (Number),
    FOREIGN KEY (Company_Name) REFERENCES SOFTWARE_COMPANY(Company_Name),
    FOREIGN KEY (SSN) REFERENCES EMPLOYEE(SSN)
);

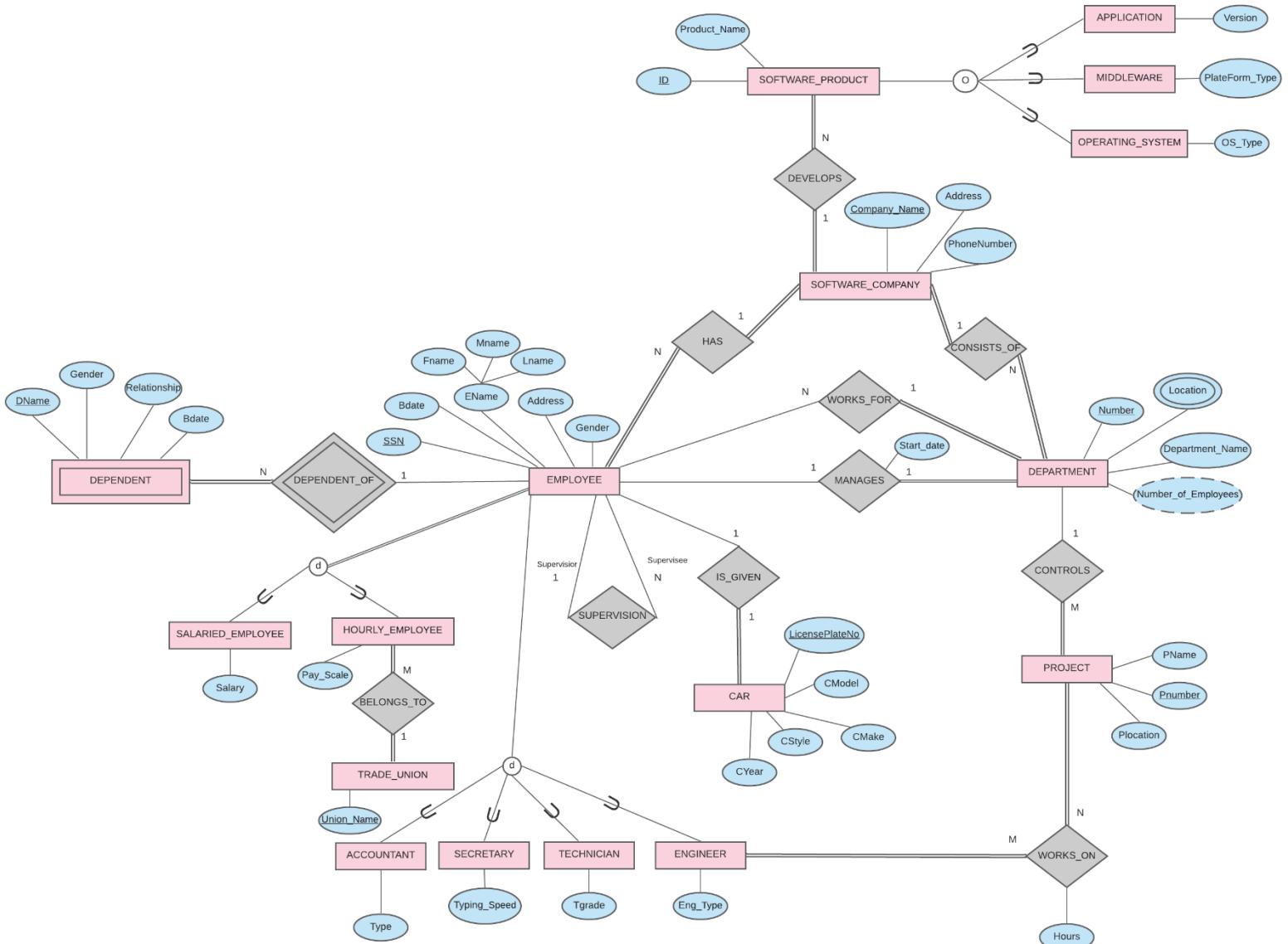
CREATE TABLE PROJECT
(
    PName INT NOT NULL,
    PNumber INT NOT NULL,
    Number INT NOT NULL,
    PRIMARY KEY (PNumber),
    FOREIGN KEY (Number) REFERENCES DEPARTMENT(Number)
);

CREATE TABLE Works_On
(
    Hours INT NOT NULL,
    SSN INT NOT NULL,
    PNumber INT NOT NULL,
    PRIMARY KEY (SSN, PNumber),
    FOREIGN KEY (SSN) REFERENCES EMPLOYEE(SSN),
    FOREIGN KEY (PNumber) REFERENCES PROJECT(PNumber)
);

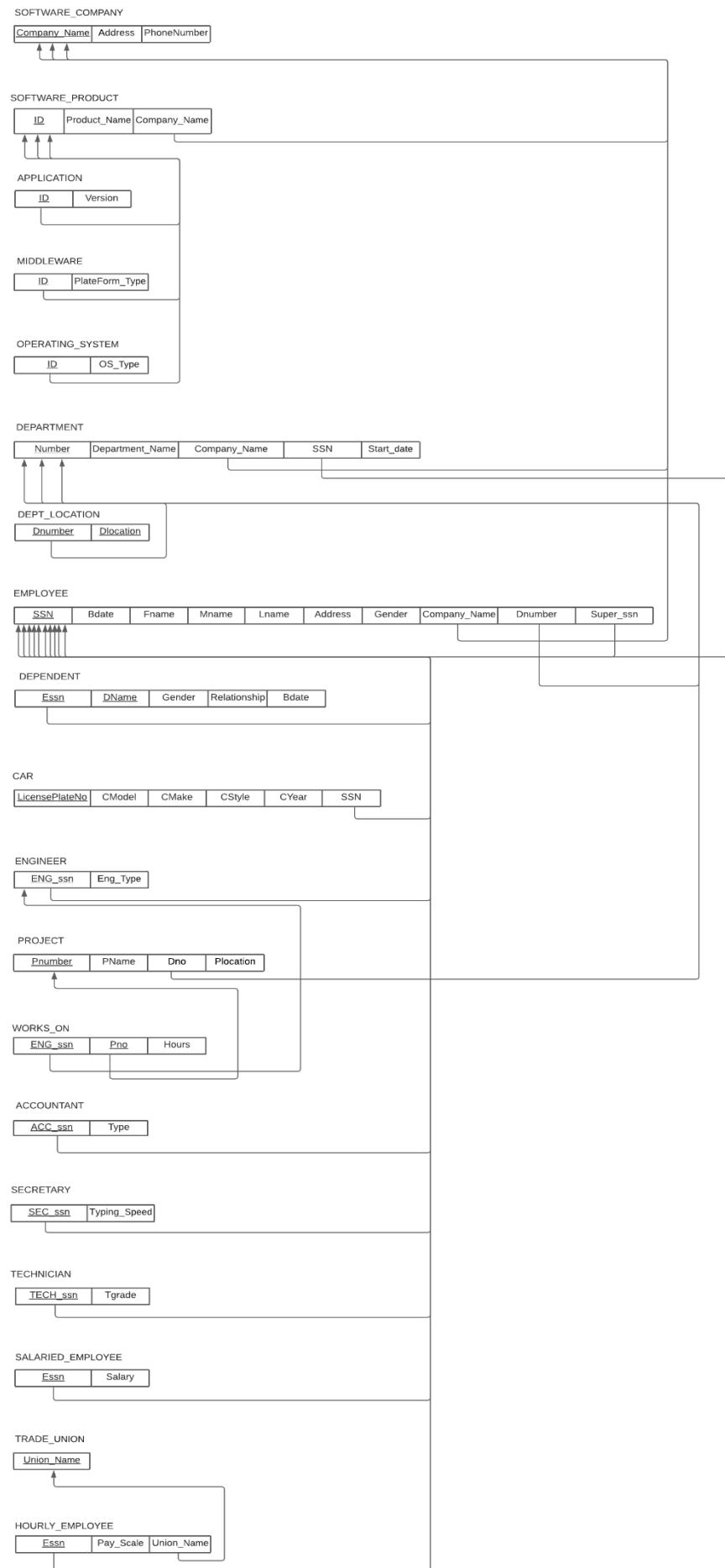
CREATE TABLE DEPARTMENT_Location
(
    Location INT NOT NULL,
    Number INT NOT NULL,
    PRIMARY KEY (Location, Number),
    FOREIGN KEY (Number) REFERENCES DEPARTMENT(Number)
);

```

G- EER diagram



H- Database Schema



I- SQL Sample

- Creating tables:

The screenshot displays two instances of the phpMyAdmin interface. Both instances have a similar layout with a sidebar on the left containing a tree view of databases and a main panel on the right with tabs for Databases, SQL, Status, and User accounts.

Top Instance (Server: 127.0.0.1):

- Databases Tab:** Shows the current server (127.0.0.1) and lists databases: New, cd_library_management_system, information_schema, mysql, performance_schema, phpmyadmin, test, whatever.
- SQL Tab:** Contains the SQL query:

```
1 CREATE DATABASE software_comp;
```

Bottom Instance (Server: 127.0.0.1 » Database: software_comp):

- Structure Tab:** Shows the current database (software_comp).
- SQL Tab:** Contains the SQL query:

```
1 CREATE TABLE SOFTWARE_COMPANY(2 Company_Name varchar(30),3 Address varchar(30),4 PhoneNumber char(8),5 PRIMARY key(Company_Name)6 );
```

phpMyAdmin

Server: 127.0.0.1 » Database: software_comp

Structure SQL Search Query Export Import Operations Privileges Routines

Run SQL query/queries on database software_comp:

```

1 CREATE TABLE SOFTWARE_PRODUCT(
2 ID Integer,
3 Product_Name varchar(30),
4 Company_Name varchar(30),
5 PRIMARY key(ID),
6 FOREIGN KEY (Company_Name) REFERENCES software_company(Company_Name) ON DELETE RESTRICT ON UPDATE CASCADE
7 );

```

phpMyAdmin

Server: 127.0.0.1 » Database: software_comp

Structure SQL Search Query Export Import Operations Privileges

Run SQL query/queries on database software_comp:

```

1 CREATE TABLE APPLICATION(
2 ID Integer,
3 Version varchar(20),
4 PRIMARY key(ID),
5 FOREIGN KEY (ID) REFERENCES SOFTWARE_PRODUCT(ID) ON DELETE CASCADE ON UPDATE CASCADE
6 );

```

phpMyAdmin

Server: 127.0.0.1 » Database: software_comp

Structure SQL Search Query Export Import Operations Privileges

Run SQL query/queries on database software_comp:

```

1 CREATE TABLE MIDDLEWARE(
2 ID Integer,
3 PlateForm_Type varchar(30),
4 PRIMARY key(ID),
5 FOREIGN KEY (ID) REFERENCES SOFTWARE_PRODUCT(ID) ON DELETE CASCADE ON UPDATE CASCADE
6 );

```

phpMyAdmin

Server: 127.0.0.1 » Database: software_comp

Structure SQL Search Query Export Import Operations

Run SQL query/queries on database software_comp:

```

1 CREATE TABLE OPERATING_SYSTEM(
2   ID Integer,
3   OS_Type varchar(30),
4   PRIMARY key(ID),
5   FOREIGN KEY (ID) REFERENCES SOFTWARE_PRODUCT(ID) ON DELETE CASCADE ON UPDATE CASCADE
6 );

```

phpMyAdmin

Server: 127.0.0.1 » Database: software_comp

Structure SQL Search Query Export Import Operations Privileges Routine

Run SQL query/queries on database software_comp:

```

1 CREATE TABLE DEPARTMENT(
2   Number INTEGER,
3   Department_Name varchar(30),
4   Company_Name varchar(30),
5   Start_date varchar(20),
6   PRIMARY KEY(Number),
7   FOREIGN KEY (Company_Name) REFERENCES software_company(Company_Name) ON DELETE RESTRICT ON UPDATE CASCADE
8 );

```

phpMyAdmin

Server: 127.0.0.1 » Database: software_comp

Structure SQL Search Query Export Import Operations Privileges

Run SQL query/queries on database software_comp:

```

1 CREATE TABLE DEPT_LOCATION(
2   Dnumber INTEGER,
3   Dlocation varchar(30),
4   PRIMARY KEY(Dnumber,Dlocation),
5   FOREIGN KEY (Dnumber) REFERENCES DEPARTMENT(Number) ON DELETE CASCADE ON UPDATE CASCADE
6 );

```

Clear Format Get auto-saved query

phpMyAdmin

Server: 127.0.0.1 » Database: software_comp

Structure SQL Search Query Export Import Operations Privileges Routines

Recent Favorites

New
cd_library_management_system
information_schema
mysql
performance_schema
phpmyadmin
software_comp
New
application
department
dept_location
middleware
operating_system
software_company
software_product
test
whatever

Run SQL query/queries on database software_comp:

```
1 CREATE TABLE EMPLOYEE(
2   SSN char(14),
3   Bdate varchar(20),
4   Fname varchar(20),
5   Mname varchar(20),
6   Lname varchar(20),
7   Address varchar(30),
8   Gender varchar(10),
9   Company_Name varchar(30),
10  Dnumber INTEGER,
11  Super_ssn char(14),
12  PRIMARY KEY (SSN),
13  FOREIGN KEY (Super_ssn) REFERENCES EMPLOYEE(SSN) ON DELETE SET NULL ON UPDATE CASCADE,
14  FOREIGN KEY (Company_Name) REFERENCES software_company(Company_Name) ON DELETE RESTRICT ON UPDATE CASCADE,
15  FOREIGN KEY (Dnumber) REFERENCES DEPARTMENT(Number) ON DELETE SET NULL ON UPDATE CASCADE
16 );
```

Clear Format Get auto-saved query

Bind parameters

phpMyAdmin

Server: 127.0.0.1 » Database: software_comp

Structure SQL Search Query Export Import Operations Privileges Routines Events

Recent Favorites

New
cd_library_management_system
information_schema
mysql
performance_schema
phpmyadmin
software_comp
New
application
department
dept_location
employee
middleware
operating_system
software_company
software_product
test
whatever

Run SQL query/queries on database software_comp:

```
1 ALTER TABLE department ADD SSN char(14);
2 ALTER TABLE department ADD CONSTRAINT FOREIGN KEY (SSN) REFERENCES employee(SSN) ON DELETE SET NULL ON UPDATE CASCADE;
```

Clear Format Get auto-saved query

Bind parameters

phpMyAdmin

Server: 127.0.0.1 » Database: software_comp

Structure SQL Search Query Export Import Operations

Recent Favorites

New
cd_library_management_system
information_schema
mysql
performance_schema
phpmyadmin
software_comp
New
application
department
dept_location
employee
middleware
operating_system
software_company
software_product
test
whatever

Run SQL query/queries on database software_comp:

```
1 CREATE TABLE DEPENDENT(
2   Essn char(14),
3   DName varchar(30),
4   Gender varchar(10),
5   Relationship varchar(30),
6   Bdate varchar(20),
7   PRIMARY KEY(Essn,DName),
8   FOREIGN KEY(Essn) REFERENCES EMPLOYEE(SSN) ON DELETE CASCADE ON UPDATE CASCADE
9 );
```

Clear Format Get auto-saved query

phpMyAdmin

Server: 127.0.0.1 » Database: software_comp

Structure SQL Search Query Export Import Operations

Recent Favorites

New
cd_library_management_system
information_schema
mysql
performance_schema
phpmyadmin
software_comp
New
application
department
dependent
dept_location
employee
middleware
operating_system
software_company
software_product
test
whatever

Run SQL query/queries on database software_comp:

```
1 CREATE TABLE CAR(
2   LicensePlateNo varchar(20),
3   CModel varchar(30),
4   CMake varchar(30),
5   CStyle varchar(30),
6   CYear char(4),
7   SSN char(14),
8   PRIMARY KEY (LicensePlateNo),
9   FOREIGN KEY (SSN) REFERENCES employee(SSN) ON DELETE SET NULL ON UPDATE CASCADE
10 );
```

Clear Format Get auto-saved query

Bind parameters

Bookmark this SQL query:

phpMyAdmin

Recent Favorites

- New
- cd_library_management_system
- information_schema
- mysql
- performance_schema
- phpmyadmin
- software_comp**
 - New
 - application
 - car
 - department
 - dependent
 - dept_location
 - employee
 - middleware
 - operating_system
 - software_company
 - software_product
- test
- whatever

Server: 127.0.0.1 » Database: software_comp

Structure SQL Search Query Export Import Operations

Run SQL query/queries on database software_comp:

```

1 CREATE TABLE ENGINEER(
2 ENG_ssn char(14),
3 Eng_Type varchar(30),
4 PRIMARY KEY (ENG_ssn),
5 FOREIGN KEY (ENG_ssn) REFERENCES EMPLOYEE(SSN) ON DELETE RESTRICT ON UPDATE CASCADE
6 );

```

Clear Format Get auto-saved query

Bind parameters

Bookmark this SQL query:

phpMyAdmin

Recent Favorites

- New
- cd_library_management_system
- information_schema
- mysql
- performance_schema
- phpmyadmin
- software_comp**
 - New
 - application
 - car
 - department
 - dependent
 - dept_location
 - employee
 - engineer
 - middleware
 - operating_system
 - software_company
 - software_product
- test
- whatever

Server: 127.0.0.1 » Database: software_comp

Structure SQL Search Query Export Import Operations

Run SQL query/queries on database software_comp:

```

1 CREATE TABLE PROJECT(
2 Pnumber INTEGER,
3 PName varchar(30),
4 Dno INTEGER,
5 PRIMARY KEY (Pnumber),
6 FOREIGN KEY (Dno) REFERENCES DEPARTMENT(Number) ON DELETE SET NULL ON UPDATE CASCADE
7 );

```

Clear Format Get auto-saved query

Bind parameters

Bookmark this SQL query:

phpMyAdmin

Recent Favorites

- New
- cd_library_management_system
- information_schema
- mysql
- performance_schema
- phpmyadmin
- software_comp**
 - New
 - application
 - car
 - department
 - dependent
 - dept_location
 - employee
 - engineer
 - middleware
 - operating_system
 - project
 - software_company
 - software_product
 - works_on
- test
- whatever

Server: 127.0.0.1 » Database: software_comp

Structure SQL Search Query Export Import Operations Print

Run SQL query/queries on database software_comp:

```

1 CREATE TABLE WORKS_ON(
2 ENG_ssn char(14),
3 Pno INTEGER,
4 Hours Integer,
5 PRIMARY KEY (ENG_ssn,Pno),
6 FOREIGN KEY (ENG_ssn) REFERENCES ENGINEER(ENG_ssn) ON DELETE CASCADE ON UPDATE CASCADE,
7 FOREIGN KEY (Pno) REFERENCES PROJECT(Pnumber) ON DELETE CASCADE ON UPDATE CASCADE
8 );

```

Clear Format Get auto-saved query

Bind parameters

Bookmark this SQL query:

phpMyAdmin

Recent Favorites

- New
- cd_library_management_system
- information_schema
- mysql
- performance_schema
- phpmyadmin
- software_comp**
 - New
 - application
 - car
 - department
 - dependent
 - dept_location
 - employee
 - engineer
 - middleware
 - operating_system
 - project
 - software_company
 - software_product
 - works_on
- test

Server: 127.0.0.1 » Database: software_comp

Structure SQL Search Query Export Import Operations Print

Run SQL query/queries on database software_comp:

```

1 CREATE TABLE ACCOUNTANT(
2 ACC_ssn char(14),
3 Type varchar(30),
4 PRIMARY KEY (ACC_ssn),
5 FOREIGN KEY (ACC_ssn) REFERENCES EMPLOYEE(SSN) ON DELETE CASCADE ON UPDATE CASCADE
6 );

```

Clear Format Get auto-saved query

Bind parameters

Bookmark this SQL query:

phpMyAdmin

Server: 127.0.0.1 » Database: software_comp

Structure SQL Search Query Export Import Operations

Run SQL query/queries on database software_comp:

```

1 CREATE TABLE SECRETARY(
2 SEC_ssn char(14),
3 Typing_Speed varchar(30),
4 PRIMARY KEY (SEC_ssn),
5 FOREIGN KEY (SEC_ssn) REFERENCES EMPLOYEE(SSN) ON DELETE CASCADE ON UPDATE CASCADE
6 );

```

Clear Format Get auto-saved query

Bind parameters

Bookmark this SQL query:

phpMyAdmin

Server: 127.0.0.1 » Database: software_comp

Structure SQL Search Query Export Import Operations

Run SQL query/queries on database software_comp:

```

1 CREATE TABLE TECHNICIAN(
2 TECH_ssn char(14),
3 Tgrade varchar(30),
4 PRIMARY KEY (TECH_ssn),
5 FOREIGN KEY (TECH_ssn) REFERENCES EMPLOYEE(SSN) ON DELETE CASCADE ON UPDATE CASCADE
6 );

```

Clear Format Get auto-saved query

Bind parameters

Bookmark this SQL query:

Delimiter : Show this query here again Retain query box Rollback when finished Enable

phpMyAdmin

Server: 127.0.0.1 » Database: software_comp

Structure SQL Search Query Export Import Operations

Recent Favorites

New
cd_library_management_system
information_schema
mysql
performance_schema
phpmyadmin
software_comp
New
accountant
application
car
department
dependent
dept_location
employee
engineer
middleware
operating_system
project
secretary
software_company
software_product
technician
works_on

Run SQL query/queries on database software_comp:

```

1 CREATE TABLE SALARIED_EMPLOYEE(
2   Essn char(14),
3   Salary Integer,
4   PRIMARY KEY (Essn),
5   FOREIGN KEY (Essn) REFERENCES EMPLOYEE(SSN) ON DELETE CASCADE ON UPDATE CASCADE
6 );

```

Clear Format Get auto-saved query

Bind parameters

Bookmark this SQL query:

Delimiter : Show this query here again Retain query box Rollback when finished Enable

phpMyAdmin

Server: 127.0.0.1 » Database: software_comp

Structure SQL Search

Recent Favorites

New
cd_library_management_system
information_schema
mysql
performance_schema
phpmyadmin
software_comp
New
accountant
application
car
department
dependent
dept_location
employee
engineer
middleware
operating_system
project
salaried_employee
secretary
software_company
software_product
technician
works_on

Run SQL query/queries on database software_comp:

```

1 CREATE TABLE TRADE_UNION(
2   Union_Name varchar(30),
3   PRIMARY KEY (Union_Name)
4 );

```

Clear Format Get auto-saved query

Bind parameters

Bookmark this SQL query:

Delimiter : Show this query here again

phpMyAdmin

Server: 127.0.0.1 » Database: software_comp

Structure SQL Search Query Export Import Operations Privileges

New

cd_library_management_system

information_schema

mysql

performance_schema

phpmyadmin

software_comp

- New
- accountant
- application
- car
- department
- dependent
- dept_location
- employee
- engineer
- middleware
- operating_system
- project
- salaried_employee
- secretary
- software_company
- software_product
- technician
- trade_union
- works_on

Run SQL query/queries on database software_comp:

```
1 CREATE TABLE HOURLY_EMPLOYEE(
2   Essn char(14),
3   Pay_Scale varchar(30),
4   Union_Name varchar(30),
5   PRIMARY KEY (Essn),
6   FOREIGN KEY (Essn) REFERENCES EMPLOYEE(SSN) ON DELETE CASCADE ON UPDATE CASCADE,
7   FOREIGN KEY (Union_Name) REFERENCES TRADE_UNION(Union_Name) ON DELETE RESTRICT ON UPDATE CASCADE
8 );
```

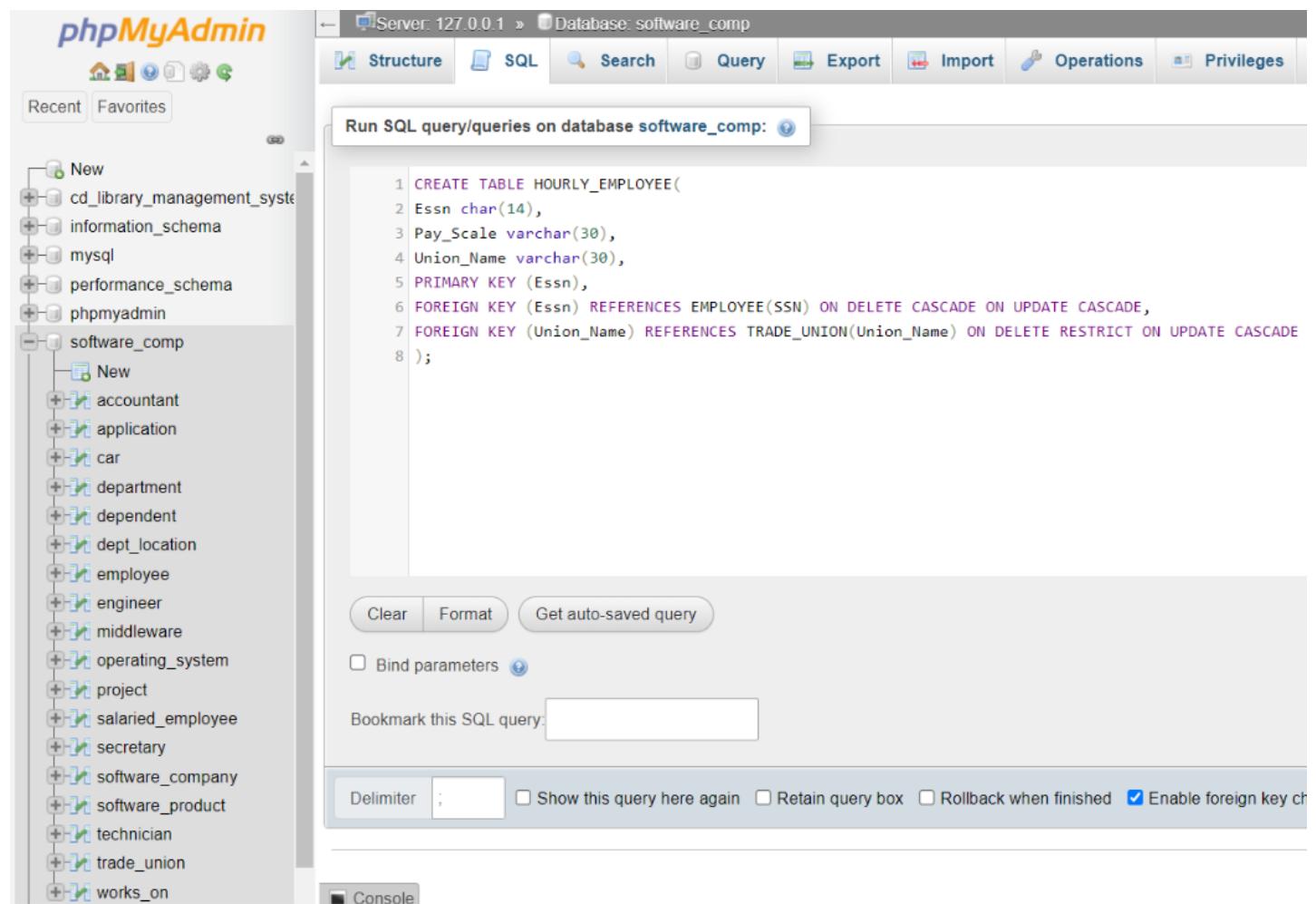
Clear Format Get auto-saved query

Bind parameters

Bookmark this SQL query:

Delimiter : Show this query here again Retain query box Rollback when finished Enable foreign key ch

Console



Insertion:

```
1 INSERT INTO software_company VALUES("SPIRE DIGITAL","Cairo","22735279");
2 INSERT INTO software_company VALUES("Fingent Corp","Giza","22947326");
3 INSERT INTO software_company VALUES("Amadeus","Alexandria","22184639");
4 INSERT INTO software_company VALUES("TopOfStack","Hurghada","22173948");
5 INSERT INTO software_company VALUES("Intuit","Sharm El-Sheikh","22439538");
```

```
1 INSERT INTO department VALUES(1,"Product development","SPIRE DIGITAL","1998-08-04",NULL);
2 INSERT INTO department VALUES(2,"Sales and marketing","SPIRE DIGITAL","1998-09-10",NULL);
3 INSERT INTO department VALUES(3,"Accounts and Finance","SPIRE DIGITAL","1998-10-22",NULL);
4 INSERT INTO department VALUES(4,"Security and transport","SPIRE DIGITAL","1998-11-17",NULL);
5 INSERT INTO department VALUES(5,"Infrastructures","SPIRE DIGITAL","1998-12-07",NULL);
```

```
1 INSERT INTO employee VALUES("12345678927427","1970-01-09","John","A","Smith","Cairo","Male","SPIRE DIGITAL",1,NULL);
2 INSERT INTO employee VALUES("33344555528325","1965-01-09","Frankin","S","Wong","Giza","Male","SPIRE DIGITAL",2,"12345678927427");
3 INSERT INTO employee VALUES("99988777717246","1965-01-09","Alicia","H","Hall","Alexandria","Female","SPIRE DIGITAL",3,"12345678927427");
4 INSERT INTO employee VALUES("98761482554321","1965-01-09","Jennlier","E","Stewart","Cairo","Female","SPIRE DIGITAL",4,"12345678927427");
5 INSERT INTO employee VALUES("66681428684444","1965-01-09","Ramesh","T","King","Giza","Female","SPIRE DIGITAL",5,"12345678927427");
6 INSERT INTO employee VALUES("45324296453453","1965-01-09","Joyce","S","Cook","Alexandria","Female","SPIRE DIGITAL",1,NULL);
7 INSERT INTO employee VALUES("98792536487987","1965-01-09","Scott","U","Coleman","Cairo","Male","SPIRE DIGITAL",2,"45324296453453");
8 INSERT INTO employee VALUES("88843749665555","1965-01-09","James","Q","Morgan","Giza","Male","SPIRE DIGITAL",3,"45324296453453");
9 INSERT INTO employee VALUES("85280632848264","1965-01-09","Harris","T","Carter","Alexandria","Female","SPIRE DIGITAL",4,"45324296453453");
10 INSERT INTO employee VALUES("27475765893648","1965-01-09","Thompson","D","Torres","Cairo","Male","SPIRE DIGITAL",5,"45324296453453");
11 INSERT INTO employee VALUES("78436753457442","1965-01-09","Ramirez","L","Alexander","Giza","Female","SPIRE DIGITAL",1,NULL);
12 INSERT INTO employee VALUES("23565456344532","1965-01-09","Rodriguez","Z","Kelly","Alexandria","Male","SPIRE DIGITAL",2,"78436753457442");
13 INSERT INTO employee VALUES("56866245255477","1965-01-09","Collins","O","Diaz","Cairo","Male","SPIRE DIGITAL",3,"78436753457442");
14 INSERT INTO employee VALUES("87738246725562","1965-01-09","Phillips","W","Griffin","Giza","Male","SPIRE DIGITAL",4,"78436753457442");
15 INSERT INTO employee VALUES("142457456453763","1965-01-09","Turner","P","Simmons","Alexandria","Male","SPIRE DIGITAL",5,"78436753457442");
16
```

```
1 INSERT INTO dependent VALUES("12345678927427","Baker","Male","Assistant","1980-10-17");
2 INSERT INTO dependent VALUES("45324296453453","Cox","Male","Assistant","1983-06-25");
3 INSERT INTO dependent VALUES("99988777717246","Nelson","Male","Assistant","1981-09-15");
4 INSERT INTO dependent VALUES("78436753457442","White","Female","Assistant","1986-03-10");
5 INSERT INTO dependent VALUES("14245745645376","Powell","Male","Assistant","1989-07-04");
6
```

```
1 INSERT INTO works_on VALUES("33344555528325","1","20");
2 INSERT INTO works_on VALUES("66681428684444","1","10");
3 INSERT INTO works_on VALUES("27475765893648","2","15");
4 INSERT INTO works_on VALUES("85280632848264","2","30");
5 INSERT INTO works_on VALUES("88843749665555","3","27");
6 INSERT INTO works_on VALUES("98761482554321","3","17");
7 INSERT INTO works_on VALUES("23565456344532","4","40");
8 INSERT INTO works_on VALUES("56866245255477","4","37");
9 INSERT INTO works_on VALUES("87738246725562","5","32");
10 INSERT INTO works_on VALUES("98792536487987","5","29");
11 |
```

```
1 INSERT INTO engineer VALUES("23565456344532","Front-End Engineer");
2 INSERT INTO engineer VALUES("27475765893648","Back-End Engineer");
3 INSERT INTO engineer VALUES("33344555528325","Full Stack Enginee");
4 INSERT INTO engineer VALUES("56866245255477","Software Engineer in Test");
5 INSERT INTO engineer VALUES("66681428684444","DevOps Engineer");
6 INSERT INTO engineer VALUES("85280632848264","Security Engineer");
7 INSERT INTO engineer VALUES("87738246725562","Software Engineer in Test");
8 INSERT INTO engineer VALUES("88843749665555","Back-End Enginee");
9 INSERT INTO engineer VALUES("98761482554321","Front-End Engineer");
10 INSERT INTO engineer VALUES("98792536487987","Full Stack Enginee");
11 |
```

```
1 INSERT INTO project VALUES("1","Project X","1","1st floor");
2 INSERT INTO project VALUES("2","Project Y","2","2nd floor");
3 INSERT INTO project VALUES("3","Project Z","3","3rd floor");
4 INSERT INTO project VALUES("4","Project R","4","4th floor");
5 INSERT INTO project VALUES("5","Project S","5","5th floor");
6 |
```

Tables after insertion:

Table: works_on

		ENG_ssn	Pno	Hours		
<input type="checkbox"/>	Edit	Copy	Delete	23565456344532	4	40
<input type="checkbox"/>	Edit	Copy	Delete	27475765893648	2	15
<input type="checkbox"/>	Edit	Copy	Delete	33344555528325	1	20
<input type="checkbox"/>	Edit	Copy	Delete	56866245255477	4	37
<input type="checkbox"/>	Edit	Copy	Delete	66681428684444	1	10
<input type="checkbox"/>	Edit	Copy	Delete	85280632848264	2	30
<input type="checkbox"/>	Edit	Copy	Delete	87738246725562	5	32
<input type="checkbox"/>	Edit	Copy	Delete	88843749065555	3	27
<input type="checkbox"/>	Edit	Copy	Delete	98761482554321	3	17
<input type="checkbox"/>	Edit	Copy	Delete	98792536487987	5	29

Table: department

	Number	Department_Name	Company_Name	Start_date	SSN
<input type="checkbox"/>	1	Product development	SPIRE DIGITAL	1998-08-04	12345678927427
<input type="checkbox"/>	2	Sales and marketing	SPIRE DIGITAL	1998-09-10	45324296453453
<input type="checkbox"/>	3	Accounts and Finance	SPIRE DIGITAL	1998-10-22	99988777717246
<input type="checkbox"/>	4	Security and transport	SPIRE DIGITAL	1998-11-17	78436753457442
<input type="checkbox"/>	5	Infrastructures	SPIRE DIGITAL	1998-12-07	14245745645376

phpMyAdmin

Recent | Favorites

Server: 127.0.0.1 » Database: software_comp » Table: dependent

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers

Showing rows 0 - 4 (5 total, Query took 0.0007 seconds.)

SELECT * FROM `dependent`

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all Number of rows: 25 Filter rows: Search this table Sort by key: None

+ Options

	Essn	DName	Gender	Relationship	Bdate
<input type="checkbox"/>	12345678927427	Baker	Male	Assistant	1980-10-17
<input type="checkbox"/>	14245745645376	Powell	Male	Assistant	1989-07-04
<input type="checkbox"/>	45324296453453	Cox	Male	Assistant	1993-06-25
<input type="checkbox"/>	78436753457442	White	Female	Assistant	1986-03-10
<input type="checkbox"/>	99988777717246	Nelson	Male	Assistant	1981-09-15

Check all With selected: Edit Copy Delete Export

Show all Number of rows: 25 Filter rows: Search this table Sort by key: None

Query results operations

Print Copy to clipboard Export Display chart Create view

Bookmark this SQL query

phpMyAdmin

Recent | Favorites

Server: 127.0.0.1 » Database: software_comp » Table: employee

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all Number of rows: 25 Filter rows: Search this table Sort by key: None

+ Options

	SSN	Bdate	Fname	Mname	Lname	Address	Gender	Company_Name	Dnumber	Super_ssn
<input type="checkbox"/>	12345678927427	1970-01-09	John	A	Smith	Cairo	Male	SPIRE DIGITAL	1	NULL
<input type="checkbox"/>	14245745645376	1965-01-09	Turner	P	Simmons	Alexandria	Male	SPIRE DIGITAL	5	NULL
<input type="checkbox"/>	23565456344532	1965-01-09	Rodriguez	Z	Kelly	Alexandria	Male	SPIRE DIGITAL	4	78436753457442
<input type="checkbox"/>	27475765893648	1965-01-09	Thompson	D	Torres	Cairo	Male	SPIRE DIGITAL	2	45324296453453
<input type="checkbox"/>	3334455528325	1965-01-09	Franklin	S	Wong	Giza	Male	SPIRE DIGITAL	1	12345678927427
<input type="checkbox"/>	45324296453453	1965-01-09	Joyce	S	Cook	Alexandria	Female	SPIRE DIGITAL	2	NULL
<input type="checkbox"/>	56866245255477	1965-01-09	Collins	O	Diaz	Cairo	Male	SPIRE DIGITAL	4	78436753457442
<input type="checkbox"/>	66681428884444	1965-01-09	Ramesh	I	King	Giza	Female	SPIRE DIGITAL	1	12345678927427
<input type="checkbox"/>	78436753457442	1965-01-09	Ramirez	L	Alexander	Giza	Female	SPIRE DIGITAL	4	NULL
<input type="checkbox"/>	85280632848264	1965-01-09	Harris	T	Carter	Alexandria	Female	SPIRE DIGITAL	2	45324296453453
<input type="checkbox"/>	87738246725562	1965-01-09	Phillips	W	Griffin	Giza	Male	SPIRE DIGITAL	5	14245745645376
<input type="checkbox"/>	88843749665555	1965-01-09	James	Q	Morgan	Giza	Male	SPIRE DIGITAL	3	99988777717246
<input type="checkbox"/>	98761482554321	1965-01-09	Jennier	E	Stewart	Cairo	Female	SPIRE DIGITAL	3	99988777717246
<input type="checkbox"/>	98792536487987	1965-01-09	Scott	U	Coleman	Cairo	Male	SPIRE DIGITAL	5	14245745645376
<input type="checkbox"/>	99988777717246	1965-01-09	Alicia	H	Hall	Alexandria	Female	SPIRE DIGITAL	3	NULL

Check all With selected: Edit Copy Delete Export

phpMyAdmin

Server: 127.0.0.1 » Database: software_comp » Table: engineer

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all Number of rows: 25 Filter rows Search this table Sort by key: None

+ Options ENG_ssn Eng_Type

	Edit	Copy	Delete	ENG_ssn	Eng_Type
<input type="checkbox"/>				23565456344532	Front-End Engineer
<input type="checkbox"/>				27475765893648	Back-End Engineer
<input type="checkbox"/>				33344555528325	Full Stack Engineer
<input type="checkbox"/>				56866245255477	Software Engineer in Test
<input type="checkbox"/>				66681428684444	DevOps Engineer
<input type="checkbox"/>				85280632848264	Security Engineer
<input type="checkbox"/>				87738246725562	Software Engineer in Test
<input type="checkbox"/>				88843749665555	Back-End Engineer
<input type="checkbox"/>				98761482554321	Front-End Engineer
<input type="checkbox"/>				98792536487987	Full Stack Engineer

Check all With selected: Edit Copy Delete Export

Show all Number of rows: 25 Filter rows Search this table Sort by key: None

Query results operations

Print Copy to clipboard Export Display chart Create view

phpMyAdmin

Server: 127.0.0.1 » Database: software_comp » Table: project

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Showing rows 0 - 4 (5 total, Query took 0.0014 seconds.)

SELECT * FROM `project`

Show all Number of rows: 25 Filter rows Search this table Sort by key: None

+ Options Pnumber PName Dno Plocation

	Edit	Copy	Delete	Pnumber	PName	Dno	Plocation
<input type="checkbox"/>				1	Project X	1	Roxy
<input type="checkbox"/>				2	Project Y	2	Roxy
<input type="checkbox"/>				3	Project Z	3	Rehab
<input type="checkbox"/>				4	Project R	4	Madinaty
<input type="checkbox"/>				5	Project S	5	Roxy

Check all With selected: Edit Copy Delete Export

Show all Number of rows: 25 Filter rows Search this table Sort by key: None

Query results operations

Print Copy to clipboard Export Display chart Create view

Bookmark this SQL query

phpMyAdmin

Recent Favorites

Server: 127.0.0.1 » Database: software_comp » Table: software_company

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers

Showing rows 0 - 4 (5 total; Query took 0.0010 seconds.)

SELECT * FROM `software_company`

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all Number of rows: 25 Filter rows: Search this table Sort by key: None

+ Options

		Company_Name	Address	PhoneNumber
<input type="checkbox"/>	<input type="button" value="Edit"/>	<input type="button" value="Copy"/>	<input type="button" value="Delete"/>	Amadeus Alexandria 22184639
<input type="checkbox"/>	<input type="button" value="Edit"/>	<input type="button" value="Copy"/>	<input type="button" value="Delete"/>	Fingent Corp Giza 22947326
<input type="checkbox"/>	<input type="button" value="Edit"/>	<input type="button" value="Copy"/>	<input type="button" value="Delete"/>	Intuit Sharm El-Sheikh 22439538
<input type="checkbox"/>	<input type="button" value="Edit"/>	<input type="button" value="Copy"/>	<input type="button" value="Delete"/>	SPIRE DIGITAL Cairo 22735279
<input type="checkbox"/>	<input type="button" value="Edit"/>	<input type="button" value="Copy"/>	<input type="button" value="Delete"/>	TopOfStack Hurghada 22173948

Check all With selected:

Show all Number of rows: 25 Filter rows: Search this table Sort by key: None

Query results operations

Print

Bookmark this SQL query

The screenshot shows the phpMyAdmin interface for a MySQL database named 'software_comp'. The current table is 'software_company'. The page displays 25 rows of data, with the first four visible. Each row contains the company name, address, and phone number. There are edit, copy, and delete buttons for each row. Below the table, there are buttons for printing, copying to clipboard, exporting, displaying a chart, and creating a view. On the left, a sidebar lists various databases and tables, with 'software_comp' being the active database.

		Company_Name	Address	PhoneNumber
<input type="checkbox"/>	<input type="button" value="Edit"/>	<input type="button" value="Copy"/>	<input type="button" value="Delete"/>	Amadeus Alexandria 22184639
<input type="checkbox"/>	<input type="button" value="Edit"/>	<input type="button" value="Copy"/>	<input type="button" value="Delete"/>	Fingent Corp Giza 22947326
<input type="checkbox"/>	<input type="button" value="Edit"/>	<input type="button" value="Copy"/>	<input type="button" value="Delete"/>	Intuit Sharm El-Sheikh 22439538
<input type="checkbox"/>	<input type="button" value="Edit"/>	<input type="button" value="Copy"/>	<input type="button" value="Delete"/>	SPIRE DIGITAL Cairo 22735279
<input type="checkbox"/>	<input type="button" value="Edit"/>	<input type="button" value="Copy"/>	<input type="button" value="Delete"/>	TopOfStack Hurghada 22173948

Query 1: Retrieve the first name, last name, birthday date, and address of the employees and order them by their first name

```
SELECT Fname, Lname, Bdate, Address, Dnumber
FROM EMPLOYEE
ORDER BY Fname
```

	<input type="checkbox"/> Edit	<input type="checkbox"/> Copy	<input type="checkbox"/> Delete	Fname	Lname	Bdate	Address	Dnumber
<input type="checkbox"/>				Alicia	Hall	1965-01-09	Alexandria	3
<input type="checkbox"/>				Collins	Diaz	1965-01-09	Cairo	4
<input type="checkbox"/>				Franklin	Wong	1965-01-09	Giza	1
<input type="checkbox"/>				Harris	Carter	1965-01-09	Alexandria	2
<input type="checkbox"/>				James	Morgan	1965-01-09	Giza	3
<input type="checkbox"/>				Jennluer	Stewart	1965-01-09	Cairo	3
<input type="checkbox"/>				John	Smith	1970-01-09	Cairo	1
<input type="checkbox"/>				Joyce	Cook	1965-01-09	Alexandria	2
<input type="checkbox"/>				Phillips	Griffin	1965-01-09	Giza	5
<input type="checkbox"/>				Ramesh	King	1965-01-09	Giza	1
<input type="checkbox"/>				Ramirez	Alexander	1965-01-09	Giza	4
<input type="checkbox"/>				Rodriguez	Kelly	1965-01-09	Alexandria	4
<input type="checkbox"/>				Scott	Coleman	1965-01-09	Cairo	5
<input type="checkbox"/>				Thompson	Torres	1965-01-09	Cairo	2
<input type="checkbox"/>				Turner	Simmons	1965-01-09	Alexandria	5

Query 2: Retrieve the hours and the ssn of the engineer with the maximum work hours

```
SELECT MAX(Hours),ENG_ssn
FROM WORKS_ON
WHERE Hours = ( SELECT MAX(Hours)
FROM WORKS_ON)
```

	<input type="checkbox"/> Edit	<input type="checkbox"/> Copy	<input type="checkbox"/> Delete	MAX(Hours)	ENG_ssn
<input type="checkbox"/>				40	23565456344532

Query 3: Retrieve the ssn of employees that either work on a project or manages a department

```
(SELECT ENG_ssn  
FROM WORKS_ON)
```

UNION

```
(SELECT SSN  
FROM DEPARTMENT)
```

Showing rows 0 - 14 (15 total, Query took 0.0017 seconds.)

```
(SELECT ENG_ssn FROM WORKS_ON) UNION (SELECT SSN FROM DEPARTMENT)
```

[Edit inline] [Edit] [Create PHP code]

ENG_ssn
33344555528325
66681428684444
27475765893648
85280632848264
88843749665555
98761482554321
23565456344532
56866245255477
87738246725562
98792536487987
12345678927427
14245745645376
45324296453453
78436753457442
99988777717246

Query 4: Retrieve the first name of each employee who has a dependent Whose Bdate in the 80's, the name of the dependent and their relationship and the Bdate of the dependent

```
SELECT E.FNAME, D.DName, D.Relationship, D.Bdate
```

FROM EMPLOYEE AS E, DEPENDENT AS D

```
WHERE D.Essn = E.SSN AND D.BDATE LIKE "____8_____"
```

Showing rows 0 - 3 (4 total, Query took 0.0042 seconds.)

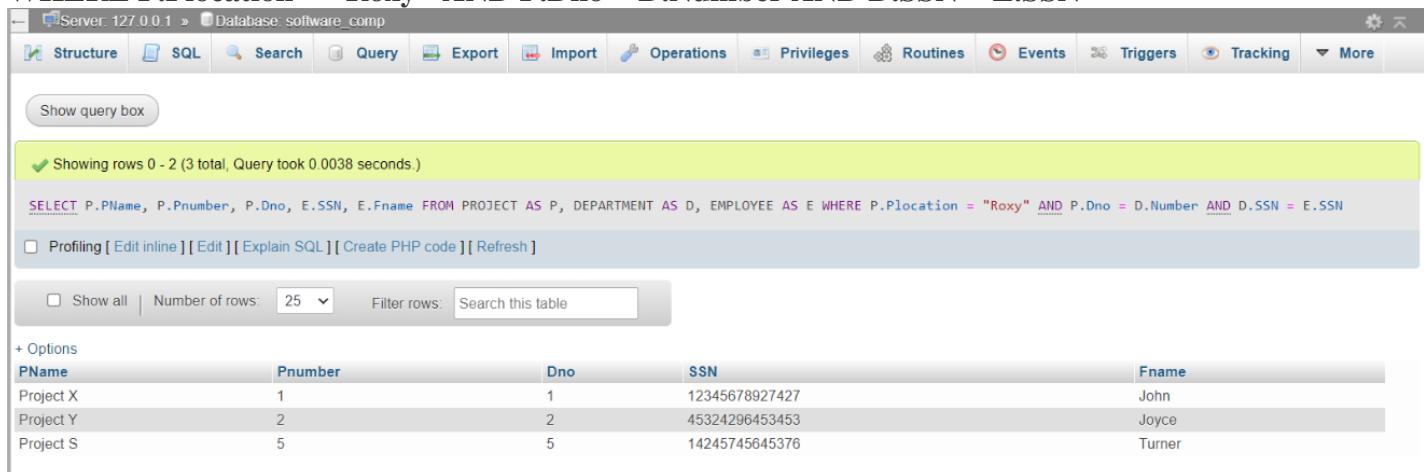
```
SELECT E.FNAME, D.DName, D.Relationship, D.Bdate FROM EMPLOYEE AS E, DEPENDENT AS D WHERE D.Essn = E.SSN AND D.BDATE LIKE "____8_____"
```

[Show query box] [Profiling] [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

FNAME	DName	Relationship	Bdate
John	Baker	Assistant	1980-10-17
Turner	Powell	Assistant	1989-07-04
Ramirez	White	Assistant	1986-03-10
Alicia	Nelson	Assistant	1981-09-15

Query 5: Retrieve the Project number, Project name, and the managing department number of the projects with location Roxy, also retrieve the name and ssn of the employees that manage those departments

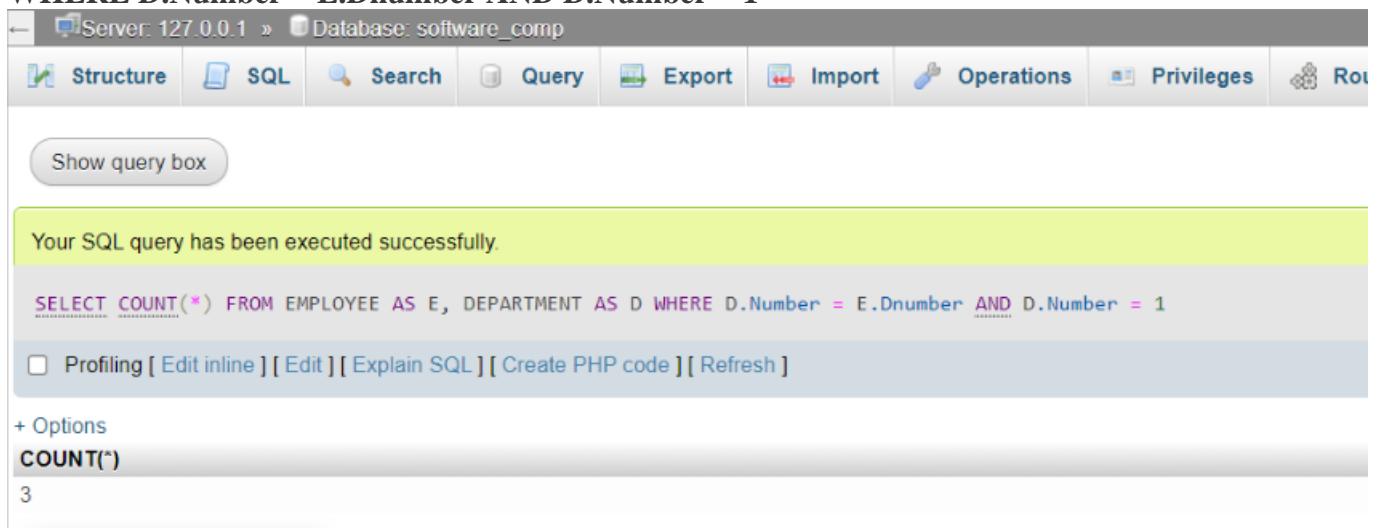
```
SELECT P.PName, P.Pnumber, P.Dno, E.SSN, E.Fname  
FROM PROJECT AS P, DEPARTMENT AS D, EMPLOYEE AS E  
WHERE P.Plocation = "Roxy" AND P.Dno = D.Number AND D.SSN = E.SSN
```



PName	Pnumber	Dno	SSN	Fname
Project X	1	1	12345678927427	John
Project Y	2	2	45324296453453	Joyce
Project S	5	5	14245745645376	Turner

Query 6: Count the number of employees in department 1

```
SELECT COUNT(*)  
FROM EMPLOYEE AS E, DEPARTMENT AS D  
WHERE D.Number = E.Dnumber AND D.Number = 1
```



COUNT(*)
3

Update Tables:

```
1 UPDATE department
2 SET Department_Name = "HR"
3 WHERE Number = 1;
4
5 UPDATE department
6 SET Department_Name = "IT services"
7 WHERE Number = 2;
8
9 UPDATE department
10 SET Department_Name = "Learning and development"
11 WHERE Number = 3;
```

Showing rows 0 - 4 (5 total, Query took 0.0011 seconds.)

```
SELECT * FROM `department`
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

	Number	Department_Name	Company_Name	Start_date	SSN
<input type="checkbox"/>	1	HR	SPIRE DIGITAL	1998-08-04	12345678927427
<input type="checkbox"/>	2	IT services	SPIRE DIGITAL	1998-09-10	45324296453453
<input type="checkbox"/>	3	Learning and development	SPIRE DIGITAL	1998-10-22	99988777717246
<input type="checkbox"/>	4	Security and transport	SPIRE DIGITAL	1998-11-17	78436753457442
<input type="checkbox"/>	5	Infrastructures	SPIRE DIGITAL	1998-12-07	14245745645376

```
1 UPDATE project
2 SET Plocation = "Suez"
3 WHERE PName = "Project X";
4
5 UPDATE project
6 SET Plocation = "Giza"
7 WHERE PName = "Project Z";
8
9 UPDATE project
10 SET Plocation = "New Cairo"
11 WHERE PName = "Project S";
```

Server: 127.0.0.1 » Database: software_comp » Table: project

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers

Showing rows 0 - 4 (total, Query took 0.0008 seconds.)

SELECT * FROM `project`

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all Number of rows: 25 Filter rows: Search this table Sort by key: None

+ Options

	Pnumber	PName	Dno	Plocation
<input type="checkbox"/>	1	Project X	1	Suez
<input type="checkbox"/>	2	Project Y	2	Roxy
<input type="checkbox"/>	3	Project Z	3	Giza
<input type="checkbox"/>	4	Project R	4	Madinaly
<input type="checkbox"/>	5	Project S	5	New Cairo

Server: 127.0.0.1 » Database: software_comp

Structure SQL Search Query Export Import Operations Privileges

Run SQL query/queries on database software_comp:

```

1 UPDATE employee
2 SET Address = "Suez" , Fname = "Ahmed" , Mname = "Y" , Lname = "Naiem"
3 WHERE SSN = "12345678927427";
4
5 UPDATE employee
6 SET Address = "6 October" , Fname = "Ali" , Mname = "K" , Lname = "Yasser"
7 WHERE SSN = "14245745645376";
8
9 UPDATE employee
10 SET Address = "New Cairo" , Fname = "Ahmed" , Mname = "R" , Lname = "Mohsen"
11 WHERE SSN = "23565456344532";

```

Server: 127.0.0.1 » Database: software_comp » Table: employee

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all Number of rows: 25 Filter rows: Search this table Sort by key: None

+ Options

	SSN	Bdate	Fname	Mname	Lname	Address	Gender	Company_Name	Dnumber	Super_ssn
<input type="checkbox"/>	12345678927427	1970-01-09	Ahmed	Y	Naiem	Suez	Male	SPIRE DIGITAL	1	NULL
<input type="checkbox"/>	14245745645376	1965-01-09	Ali	K	Yasser	6 October	Male	SPIRE DIGITAL	5	NULL
<input type="checkbox"/>	23565456344532	1965-01-09	Ahmed	R	Mohsen	New Cairo	Male	SPIRE DIGITAL	4	78436753457442
<input type="checkbox"/>	27475765893648	1965-01-09	Thompson	D	Torres	Cairo	Male	SPIRE DIGITAL	2	45324296453453
<input type="checkbox"/>	33344555528325	1965-01-09	Franklin	S	Wong	Giza	Male	SPIRE DIGITAL	1	12345678927427
<input type="checkbox"/>	45324296453453	1965-01-09	Joyce	S	Cook	Alexandria	Female	SPIRE DIGITAL	2	NULL
<input type="checkbox"/>	5686624255477	1965-01-09	Collins	O	Diaz	Cairo	Male	SPIRE DIGITAL	4	78436753457442
<input type="checkbox"/>	66681428684444	1965-01-09	Ramesh	I	King	Giza	Female	SPIRE DIGITAL	1	12345678927427
<input type="checkbox"/>	78436753457442	1965-01-09	Ramirez	L	Alexander	Giza	Female	SPIRE DIGITAL	4	NULL
<input type="checkbox"/>	85280632848264	1965-01-09	Harris	T	Carter	Alexandria	Female	SPIRE DIGITAL	2	45324296453453
<input type="checkbox"/>	87738246725562	1965-01-09	Phillips	W	Griffin	Giza	Male	SPIRE DIGITAL	5	14245745645376
<input type="checkbox"/>	88843749665555	1965-01-09	James	Q	Morgan	Giza	Male	SPIRE DIGITAL	3	99988777717246
<input type="checkbox"/>	98761482554321	1965-01-09	Jennifer	E	Stewart	Cairo	Female	SPIRE DIGITAL	3	99988777717246
<input type="checkbox"/>	98792536487987	1965-01-09	Scott	U	Coleman	Cairo	Male	SPIRE DIGITAL	5	14245745645376
<input type="checkbox"/>	99988777717246	1965-01-09	Alicia	H	Hall	Alexandria	Female	SPIRE DIGITAL	3	NULL

Delete :

```
1 DELETE FROM project
2 WHERE PName = "Project X";
3
4 DELETE FROM project
5 WHERE Pnumber = "5";
6
```

✓ Showing rows 0 - 2 (3 total, Query took 0.0324 seconds.)

SELECT * FROM `project`

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None

+ Options

	<input type="checkbox"/>	<input type="checkbox"/> Edit	<input type="checkbox"/> Copy	<input type="checkbox"/> Delete	PNumber	PName	Dno	Plocation
1	<input type="checkbox"/>	<input type="checkbox"/> Edit	<input type="checkbox"/> Copy	<input type="checkbox"/> Delete	2	Project Y	2	Roxy
2	<input type="checkbox"/>	<input type="checkbox"/> Edit	<input type="checkbox"/> Copy	<input type="checkbox"/> Delete	3	Project Z	3	Giza
3	<input type="checkbox"/>	<input type="checkbox"/> Edit	<input type="checkbox"/> Copy	<input type="checkbox"/> Delete	4	Project R	4	Madinaty

```
1 DELETE FROM dependent
2 WHERE Essn = "78436753457442";
```

```
3
4 DELETE FROM dependent
5 WHERE Essn = "99988777717246";
```

```
6
7 DELETE FROM dependent
8 WHERE Essn = "12345678927427";
```

```
9
```

✓ Showing rows 0 - 1 (2 total, Query took 0.0008 seconds.)

SELECT * FROM `dependent`

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None

+ Options

	<input type="checkbox"/>	<input type="checkbox"/> Edit	<input type="checkbox"/> Copy	<input type="checkbox"/> Delete	Essn	DName	Gender	Relationship	Bdate
1	<input type="checkbox"/>	<input type="checkbox"/> Edit	<input type="checkbox"/> Copy	<input type="checkbox"/> Delete	14245745645376	Powell	Male	Assistant	1989-07-04
2	<input type="checkbox"/>	<input type="checkbox"/> Edit	<input type="checkbox"/> Copy	<input type="checkbox"/> Delete	45324296453453	Cox	Male	Assistant	1993-06-25

Check all With selected: Edit Copy Delete Export

```
1 DELETE FROM engineer
2 WHERE Eng_Type = "Front-End Engineer";
```

```
3
4 DELETE FROM engineer
5 WHERE Eng_Type = "Back-End Engineer";
```

```
6
```

Showing rows 0 - 5 (6 total, Query took 0.0008 seconds.)

SELECT * FROM `engineer`

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

+ Options

				ENG_ssn	Eng_Type
<input type="checkbox"/>	 Edit	 Copy	 Delete	33344555528325	Full Stack Engineer
<input type="checkbox"/>	 Edit	 Copy	 Delete	56866245255477	Software Engineer in Test
<input type="checkbox"/>	 Edit	 Copy	 Delete	66681426684444	DevOps Engineer
<input type="checkbox"/>	 Edit	 Copy	 Delete	85280632848264	Security Engineer
<input type="checkbox"/>	 Edit	 Copy	 Delete	87738246725562	Software Engineer in Test
<input type="checkbox"/>	 Edit	 Copy	 Delete	98792536487987	Full Stack Engineer