

Order:

Creating the table:

```
CREATE TABLE ORDER
```

```
(Order_No    CHAR(10)    NOT NULL,
```

```
Ship_Date    DATE,
```

```
Project_No    CHAR(10)    NOT NULL,
```

```
PRIMARY KEY (Order_No),
```

```
FOREIGN KEY (Project_No) REFERENCES PROJECT(Project_No) );
```

Create Order:

```
INSERT INTO ORDER VALUES('Order_No', 'Ship-Date', 'Project_No');
```

View Order Listing:

```
SELECT * FROM ORDER;
```

Search Order:

```
SELECT * FROM ORDER WHERE Order_No LIKE '%Search_Query'%;
```

Edit Order:

```
SET Ship_Date='New_Ship_Date' WHERE Order_No='Order_No';
```

```
SET Project_No='New_Project_No' WHERE Order_No='Order_No';
```

Part:

Create the table:

```
CREATE TABLE PART
```

```
(Part_No      VARCHAR(20) NOT NULL,
```

```
PRIMARY KEY (Part_No) );
```

Create Part:

```
INSERT INTO PART VALUES('Part_No');
```

View All Parts:

```
SELECT * FROM PART;
```

Search for part:

```
SELECT * FROM PART WHERE Part_No LIKE '%Search_Query'%;
```

Delete Part:

DELETE FROM PART WHERE Part_No='Part_No';

Vendor:

Creating the Table:

CREATE TABLE VENDOR

(Vendor_ID INT NOT NULL,

Vendor_Name VARCHAR(20) NOT NULL,

Phone_No INT,

PRIMARY KEY(Vendor_ID));

Add Vendor:

INSERT INTO VENDOR VALUES('Vendor_ID', 'Vendor_Name', 'Phone_No');

View All Vendors:

SELECT * FROM VENDOR;

Search for a vendor:

SELECT * FROM VENDOR WHERE Vendor_Name LIKE '%Search_Query'%;

Edit Vendor:

SET Vendor_Name='New_Vendor_Name' WHERE Vendor_ID='Vendor_ID';

SET Phone_No='Phone_No' WHERE Vendor_ID='Vendor_ID';

Delete Vendor:

DELETE FROM VENDOR WHERE Vendor_ID='Vendor_ID';

Employees:

Creating the table:

CREATE TABLE EMPLOYEE

(SSN INT NOT NULL,

First_Name VARCHAR(255) NOT NULL,

Last_Name VARCHAR(255) NOT NULL,

DOB DATE NOT NULL,

Phone_No INT NOT NULL,

Email VARCHAR(255),

Address_Line_1 VARCHAR(255) NOT NULL,

Address_Line_2 VARCHAR(255),
City VARCHAR(255) NOT NULL,
Prov_State VARCHAR(255) NOT NULL,
Country VARCHAR(255) NOT NULL,
Postal_Zip VARCHAR(255) NOT NULL,
Job_Type VARCHAR(255),
PRIMARY KEY(SSN));

Insert an employee:

```
INSERT INTO EMPLOYEE VALUES('SSN', 'First_Name', 'Last_Name', 'DOB', 'Phone_No', 'Email',  
'Address_Line_1', 'Address_Line_2', 'City', 'Prov_State', 'Country', 'Postal_Zip', 'Job_Type');
```

View all Employees:

```
SELECT * FROM EMPLOYEE
```

Search for an Employee:

```
SELECT * FROM EMPLOYEE WHERE First_Name LIKE '%First_Search_Query%' OR WHERE Last_Name  
LIKE '%Last_Search_Query%';
```

Edit Employee:

```
SET First_Name='New_First_Name' WHERE SSN='SSN';
```

```
SET Last_Name='New_Last_Name' WHERE SSN='SSN';
```

```
SET DOB='New_DOB' WHERE SSN='SSN';
```

```
SET Phone_No='New_Phone_No' WHERE SSN='SSN';
```

```
SET Email='New_Email' WHERE SSN='SSN';
```

```
SET Address_Line_1='New_Address_Line_1' WHERE SSN='SSN';
```

```
SET Address_Line_2='New_Address_Line_2' WHERE SSN='SSN';
```

```
SET City='New_City' WHERE SSN='SSN';
```

```
SET Prov_State='New_Prov_State' WHERE SSN='SSN';
```

```
SET Country='New_Country' WHERE SSN='SSN';
```

```
SET Postal_Zip='New_Postal_Zip' WHERE SSN='SSN';
```

```
SET Job_Type='New_Job_Type' WHERE SSN='SSN';
```

Delete Employee:

DELETE EMPLOYEE WHERE SSN='SSN';

Sales have clients table create:

CREATE TABLE SALES_HAVE_CLIENTS

(Sales_SSN INT NOT NULL,

Client_ID INT NOT NULL,

FOREIGN KEY(Sales_SSN) REFERENCES EMPLOYEE(SSN),

FOREIGN KEY(Client_ID) REFERENCES CLIENT(Client_ID));

Sales proposals table create:

CREATE TABLE SALES_PROPOSALS

Sales_SSN INT NOT NULL,

Proposal_No INT NOT NULL,

FOREIGN KEY(Sales_SSN) REFERENCES EMPLOYEE(SSN),

FOREIGN KEY(Proposal_No) REFERENCES CLIENT(Proposal_No));

Vendors provide parts table create:

CREATE TABLE VENDORS_PROVIDES_PARTS

(Vendor_ID INT NOT NULL,

Part_No INT NOT NULL,

FOREIGN KEY(Vendor_Id) REFERENCES VENDOR(Vendor_ID),

FOREIGN KEY(Part_No) REFERENCES PART(Part_No));

Purchase_orders table create:

CREATE TABLE PURCHASE_ORDERS

(Purchaser_SSN INT NOT NULL,

Vendor_ID INT NOT NULL,

Purchase_Order VARCHAR(255) NOT NULL,

FOREIGN KEY(Purchaser_SSN) REFERENCES EMPLOYEE(SSN),

FOREIGN KEY(Vendor_ID) REFERENCES VENDOR(Vendor_ID));

Labour_order table create:

CREATE TABLE LABOUR_ORDER

(Labour_SSN INT NOT NULL,

```
Order_No    INT    NOT NULL,  
Start_Date  DATE    NOT NULL,  
Hours  INT    NOT NULL,  
FOREIGN KEY(Labour_SSN) REFERENCES EMPLOYEE(SSN),  
FOREIGN KEY(Order_No) REFERENCES ORDER(Order_No) );
```

Parts inventory table create:

```
CREATE TABLE PARTS_INVENTORY  
(Order_No    INT    NOT NULL,  
Part_No      INT    NOT NULL,  
Qty    INT    NOT NULL,  
FOREIGN KEY(Order_No) REFERENCES ORDER(Order_No),  
FOREIGN KEY(Part_No) REFERENCES PART(Part_No) );
```


Create Tables

CREATE TABLE CLIENT

```
(Client_Id          INT          NOT NULL,
 Email              VARCHAR(255),
 Contact_Name       VARCHAR(255),
 Company_Name       VARCHAR(255),
 Website            VARCHAR(255),
 Phone_No           INT,
 Address_Line_1     VARCHAR(255) NOT NULL,
 Address_Line_2     VARCHAR(255),
 City               VARCHAR(255) NOT NULL,
 Prov_State         VARCHAR(255) NOT NULL,
 Country            VARCHAR(255) NOT NULL,
 Postal_Zip         VARCHAR(255) NOT NULL,
 PRIMARY KEY (Client_Id) );
```

CREATE TABLE PROPOSAL

```
(Proposal_No        INT          NOT NULL,
 Title              VARCHAR(255),
 Value              FLOAT,
 Issued_Date        DATE,
 Expiry_Date        DATE,
 PRIMARY KEY (Proposal_No) );
```

CREATE TABLE CONTRACT

```
(Proposal_No        INT          NOT NULL,
 Contract_No        INT          NOT NULL,
 Start_Date         DATE,
```

Delivery_Date DATE,
Payment_Terms VARCHAR(255),
Issued_Date DATE,
Expiry_Date DATE,
PRIMARY KEY (Proposal_No, Contract_No),
FOREIGN KEY (Client_Id));

CREATE TABLE PROJECT

(Project_No INT NOT NULL,
Start_Date DATE,
End_Date DATE,
Contract_No INT NOT NULL,
Design_No VARCHAR(255) NOT NULL,
PRIMARY KEY (Project_No),
FOREIGN KEY (Contract_No, Design_No));

CREATE TABLE CLIENT_PROPOSALS

(Client_Id INT NOT NULL,
Proposal_No INT NOT NULL,
PRIMAY KEY (Client_Id, Proposal_No));

Client SQL Statements

SELECT * FROM CLIENT;

SELECT * FROM CLIENT
WHERE 'Client_Name';

INSERT INTO CLIENT


```
VALUES('Client_Id', 'Email', 'Contact_Name', 'Company_Name', 'Website', 'Phone_No',  
'Address_Line_1', 'Address_Line_2', 'City', 'Prov_State', 'Country',  
'Postal_Zip');
```

```
DELETE FROM CLIENT
```

```
WHERE Client_Id='Client_Id';
```

```
UPDATE CLIENT
```

```
SET          Email='New_Email'
```

```
WHERE        Client_Id='Client_Id';
```

```
UPDATE CLIENT
```

```
SET          Contact_Name='New_ContactName'
```

```
WHERE        Client_Id='Client_Id';
```

```
UPDATE CLIENT
```

```
SET          Phone_No='New_PhoneNo'
```

```
WHERE        Client_Id='Client_Id';
```

```
UPDATE CLIENT
```

```
SET          Address_Line_1='NewAddressLine1', Address_Line_2='NewAddressLine2'
```

```
City='NewCity', Prov_State='NewProvState', Country='NewCountry',
```

```
Postal_Zip='NewPostalZip';
```

```
WHERE        Client_Id='Client_Id';
```

Proposal SQL Statements

```
SELECT * FROM PROPOSAL;
```

```
SELECT * FROM PROPOSAL
```

```
WHERE 'Client_Name';
```

```
INSERT INTO PROPOSAL
```

```
VALUES('Proposal_no', 'Title', 'Value', 'Issued_Date', 'Expiry_Date');
```

```
DELETE FROM PROPOSAL
```

```
WHERE Proposal_No='Proposal_No';
```

```
UPDATE PROPOSAL
```

```
SET          Value='New_Value'
```

```
WHERE        Proposal_No='Proposal_No';
```

```
UPDATE PROPOSAL
```

```
SET          Expiry_Date='New_ExpiryDate'
```

```
WHERE        Proposal_No='Proposal_No';
```

Contract SQL Statements

```
SELECT * FROM CONTRACT;
```

```
SELECT * FROM CONTRACT
```

```
WHERE 'Client_Id';
```

```
INSERT INTO CONTRACT
```

```
VALUES('Proposal_no', 'Contract_No', 'Start_Date', 'Delivery_Date',  
'Payment_Terms', 'Client_Id');
```

```
DELETE FROM CONTRACT
```

```
WHERE Contract_No='Contract_No' AND Proposal_No='Proposal_No';
```

```
UPDATE CONTRACT
```

```
SET          Delivery_Date='New_DeliveryDate'
```

```
WHERE        Contract_No='Contract_No' AND Proposal_No='Proposal_No';
```

```
UPDATE CONTRACT
```

```
SET          Payment_Terms='New_PaymentTerms'
```

```
WHERE        Contract_No='Contract_No' AND Proposal_No='Proposal_No';
```

Project SQL Statements

```
SELECT * FROM PROJECT;
```

```
SELECT * FROM PROJECT
```

```
WHERE 'Project_No';
```

```
INSERT INTO PROJECT
```

```
VALUES('Project_No', 'Start_Date', 'End_Date',
```

```
'Contract_No', 'Design_No');
```

```
DELETE FROM Project
```

```
WHERE Project_No='Project_No';
```

```
UPDATE PROJECT
```

```
SET          End_Date='New_EndDate'
```

```
WHERE        Project_No='Project_No';
```

```
UPDATE PROJECT
```

SET Design_No='New_DesignNo'

WHERE Project_No='Project_No';

```
CREATE TABLE `Design` (  
  `Design_No` int(11) NOT NULL,  
  `Budget` decimal(19,4) NOT NULL  
)
```

```
-----
```

```
--
```

```
-- Table structure for table `Drawings`
```

```
--
```

```
CREATE TABLE `Drawings` (  
  `Design_No` int(11) NOT NULL,  
  `Drawing_No` int(11) NOT NULL  
)
```

```
-----
```

```
--
```

```
-- Table structure for table `Engineering_Designs`
```

```
--
```

```
CREATE TABLE `Engineering_Designs` (  
  `Eng_SSN` int(11) NOT NULL,  
  `Design_No` int(11) NOT NULL  
)
```

```
-----
```

```
--
```

```
-- Table structure for table `Engineering_Submittals`
```

--

```
CREATE TABLE `Engineering_Submittals` (  
  `Eng_SSN` int(11) NOT NULL,  
  `Submittal_No` int(11) NOT NULL  
)
```

--

-- Table structure for table `Project`

--

```
CREATE TABLE `Project` (  
  `Project_No` int(11) NOT NULL,  
  `Start_Date` date NOT NULL,  
  `End_Date` date NOT NULL,  
  `Contract_No` int(11) NOT NULL,  
  `Design_No` int(11) NOT NULL  
)
```

--

-- Table structure for table `Submittal`

--

```
CREATE TABLE `Submittal` (  
  `Submittal_No` int(11) NOT NULL,
```

```
`Contract_No` int(11) DEFAULT NULL  
)
```

```
-----
```

```
--  
-- Table structure for table `Submittals_Attachments`  
--
```

```
CREATE TABLE `Submittals_Attachments` (  
  `Submittal_No` int(11) NOT NULL,  
  `Attachment` longblob NOT NULL  
)
```

```
-----
```

```
--  
-- Table structure for table `User`  
--
```

```
CREATE TABLE `User` (  
  `Username` varchar(255) NOT NULL,  
  `Password` varchar(255) NOT NULL,  
  `User_Type` varchar(255) NOT NULL,  
  `ESSN` int(11) NOT NULL  
)
```

```
--  
-- Indexes for dumped tables
```

--

--

-- Indexes for table `Design`

--

ALTER TABLE `Design`

ADD PRIMARY KEY (`Design_No`);

--

-- Indexes for table `Drawings`

--

ALTER TABLE `Drawings`

ADD PRIMARY KEY (`Design_No`, `Drawing_No`);

--

-- Indexes for table `Engineering_Designs`

--

ALTER TABLE `Engineering_Designs`

ADD PRIMARY KEY (`Eng_SSN`, `Design_No`),

ADD KEY `fk_Design_No` (`Design_No`);

--

-- Indexes for table `Engineering_Submittals`

--

ALTER TABLE `Engineering_Submittals`

ADD PRIMARY KEY (`Eng_SSN`, `Submittal_No`),

ADD KEY `fk_Submittal_No` (`Submittal_No`);

--


```
-- Indexes for table `Project`  
--  
ALTER TABLE `Project`  
  ADD PRIMARY KEY (`Project_No`);  
  
--  
-- Indexes for table `Submittal`  
--  
ALTER TABLE `Submittal`  
  ADD PRIMARY KEY (`Submittal_No`);  
  
--  
-- Indexes for table `Submittals_Attachments`  
--  
ALTER TABLE `Submittals_Attachments`  
  ADD KEY `fk_Submittals_Attachments_Submittal_No` (`Submittal_No`);  
  
--  
-- Indexes for table `User`  
--  
ALTER TABLE `User`  
  ADD PRIMARY KEY (`Username`);  
  
--  
-- AUTO_INCREMENT for dumped tables  
--  
  
--  
-- AUTO_INCREMENT for table `Project`
```

```
--  
  
ALTER TABLE `Project`  
  
    MODIFY `Project_No` int(11) NOT NULL AUTO_INCREMENT;  
  
--  
  
-- Constraints for table `Drawings`  
  
--  
  
ALTER TABLE `Drawings`  
  
    ADD CONSTRAINT `fk_Drawings_Design_No` FOREIGN KEY (`Design_No`) REFERENCES `Design`  
    (`Design_No`) ON DELETE CASCADE ON UPDATE CASCADE;  
  
--  
  
-- Constraints for table `Engineering_Designs`  
  
--  
  
ALTER TABLE `Engineering_Designs`  
  
    ADD CONSTRAINT `fk_Engineering_Designs_Design_No` FOREIGN KEY (`Design_No`) REFERENCES  
    `Design` (`Design_No`) ON DELETE CASCADE ON UPDATE CASCADE;  
  
--  
  
-- Constraints for table `Engineering_Submittals`  
  
--  
  
ALTER TABLE `Engineering_Submittals`  
  
    ADD CONSTRAINT `fk_Engineering_Submittals_Submittal_No` FOREIGN KEY (`Submittal_No`)  
    REFERENCES `Submittal` (`Submittal_No`) ON DELETE CASCADE ON UPDATE CASCADE;  
  
--  
  
-- Constraints for table `Submittals_Attachments`  
  
--  
  
ALTER TABLE `Submittals_Attachments`
```

```
ADD CONSTRAINT `fk_Submittals_Attachments_Submittal_No` FOREIGN KEY (`Submittal_No`)
REFERENCES `Submittal` (`Submittal_No`) ON DELETE CASCADE ON UPDATE CASCADE;

COMMIT;
```

--Login

-- log in if count is 1

SELECT COUNT(*) FROM USER where username=\$username and password=\$password

-- store these in session.. use user_type to control read/write of data

SELECT username, user_type, essn FROM USER where username=\$username and password=\$password

--Project

--View Project Listing

SELECT

Project.*, Design.Budget, Client.Contact_Name, Client.Company_Name, Client.Email

FROM

PROJECT, DESIGN, CONTRACT, CLIENT

WHERE

Project.Contract_No = Design.Contract_No AND

Project.Contract_No = Contract.Contract_No AND

Contract.Client_ID = Client.Client_ID

--Search

SELECT

Project.*, Design.Budget, Client.Contact_Name, Client.Company_Name, Client.Email

FROM

PROJECT, DESIGN, CONTRACT, CLIENT

WHERE

Project.Contract_No = Design.Contract_No AND

Project.Contract_No = Contract.Contract_No AND

Contract.Client_ID = Client.Client_ID AND

(

Client.Contact_Name LIKE '%\$search_term%' OR

Client.Company_Name LIKE '%\$search_term%' OR

```
Client.Email LIKE '%$search_term%'
)
```

--Select/View Single Project

SELECT

```
Project.*,
Design.Design_No,
Design.Budget,
Client.Client_No,
Client.Contact_Name,
Client.Company_Name,
Client.Email,
Order.*
```

FROM

```
PROJECT, DESIGN, CONTRACT, CLIENT, ORDER
```

WHERE

```
Project.Project_No = $project_no AND
Project.Contract_No = Design.Contract_No AND
Project.Contract_No = Contract.Contract_No AND
Contract.Client_ID = Client.Client_ID AND
Order.Project_No = Project.Project_No
```

-- Create Project

```
INSERT INTO Project (Start_date, End_date, Contract_no, Design_No)
VALUES ($start_date, $end_date, $contract_no, $design_no)
```

-- Delete Project

```
DELETE FROM Project WHERE Project.project_no = $project_no
```

-- Edit Project

```
SELECT * FROM Project WHERE Project.project_no = $project_no
```

-- Save Project

```
UPDATE Project
```

```
SET Start_date = $start_date, End_date = $end_date
```

```
WHERE project.project_no = $project_no
```

-- Design

-- Design listing with engineering authors

```
SELECT
```

```
    Design.*,
```

```
    Employees.First_Name,
```

```
    Employees.Last_Name,
```

```
    User.username
```

```
FROM Design, Engineering_Designs, Employees, User
```

```
WHERE
```

```
    Design.Design_No = Engineering_Designs.Design_No AND
```

```
    Engineering_Designs.Eng_SSN = Employee.SSN AND
```

```
    Employee.SSN = User.ESSN
```

-- Search through design listing

```
SELECT
```

```
    Design.*,
```

```
    Employees.First_Name,
```

```
    Employees.Last_Name,
```

```
    User.username
```

```
FROM Design, Engineering_Designs, Employees, User
```

WHERE

Deisgn.Design_No = Engineering_Designs.Design_No AND

Engineering_Designs.Eng_SSN = Employee.SSN AND

Employee.SSN = User.ESSN AND

(

Design.Design_No LIKE '%\$search_term%' OR

Employees.First_Name LIKE '%\$search_term%' OR

Employees.Last_Name LIKE '%\$search_term%' OR

User.username LIKE '%\$search_term%'

)

-- View a design

SELECT

Design.*,

Employees.First_Name,

Employees.Last_Name,

User.username,

Drawing_No

FROM

Design,

Engineering_Designs,

Employees,

User,

(SELECT Drawing_No FROM Drawings WHERE Design_No = \$design_no)

WHERE

Design.Design_No = \$design_no AND

Engineering_Designs.Design_No = \$design_no AND

Engineering_Designs.Eng_SSN = Employee.SSN AND

Employee.SSN = User.ESSN AND

-- Create a design

INSERT INTO Design (Design_No, Budget)

VALUES (\$design_no, \$budget)

-- Edit a design

SELECT

*

FROM Design, Drawings

WHERE

Design.Design_No = \$design_no

-- Update a design

UPDATE Design

SET Budget = \$budget

WHERE Design_No = \$design_no

-- Add a drawing

INSERT INTO Drawings (Design_No, Drawing_No)

VALUES (\$design_no, \$drawing_no)

-- Remove a drawing

DELETE FROM Drawings

WHERE design_no = \$design_no AND drawing_no = \$drawing_no

-- Add an author

INSERT INTO Engineering_Designs (Eng_SSN, Design_No)

VALUES (\$eng_ssn, \$design_no)

-- Remove an author

DELETE FROM Engineering_Designs

WHERE Eng_SSN = \$eng_ssn and Design_No = \$design_no

-- Delete a design

DELETE FROM Design

WHERE design_no = \$design_no

-- Submittal

-- Submittal listing with engineering authors

SELECT

Submittal.*,

Employees.First_Name,

Employees.Last_Name,

User.username

FROM Submittal, Engineering_Submittals, Employees, User

WHERE

Submittal.Submittal_No = Engineering_Submittals.Submittal_No AND

Engineering_Submittals.Eng_SSN = Employee.SSN AND

Employee.SSN = User.ESSN

-- Search through submittal listing

SELECT

Submittal.*,

Employees.First_Name,

Employees.Last_Name,

User.username

FROM Submittal, Engineering_Submittals, Employees, User

WHERE

Submittal.Submittal_No = Engineering_Submittals.Submittal_No AND

Engineering_Submittals.Eng_SSN = Employee.SSN AND

Employee.SSN = User.ESSN AND

(

Submittal.Submittal_No LIKE '%\$search_term%' OR

Employees.First_Name LIKE '%\$search_term%' OR

Employees.Last_Name LIKE '%\$search_term%' OR

User.username LIKE '%\$search_term%'

)

-- View a single submittal

SELECT

Submittal.*,

Employees.First_Name,

Employees.Last_Name,

User.username,

Attachment

FROM

Submittal,

Engineering_Submittals,

Employees,

User,

(SELECT Attachment FROM Submittals_Attachments WHERE Submittal_No = \$submittal_no)

WHERE

Submittal.Submittal_No = \$submittal_no AND

Engineering_Submittals.Submittal_No = \$submittal_no AND

Engineering_Submittals.Eng_SSN = Employee.SSN AND

Employee.SSN = User.ESSN AND

-- Create a submittal

```
INSERT INTO Submittal (Submittal_No, Contract_No)
```

```
VALUES ($submittal_no, $contract_no)
```

-- Add attachment

```
INSERT INTO Submittals_Attachments
```

```
VALUES ($submittal_no, $attachment)
```

-- Add an author

```
INSERT INTO Engineering_Submittals (Eng_SSN, Submittal_No)
```

```
VALUES ($eng_ssn, $submittal_no)
```

-- Remove an author

```
DELETE FROM Engineering_Submittals
```

```
WHERE Eng_SSN = $eng_ssn and Submittal_No = $submittal_no
```

-- Delete a submittal

```
DELETE FROM Submittal
```

```
WHERE Submittal_No = $submittal_no
```

-- Update a submittal

```
UPDATE Submittal
```

```
SET Contract_No = $contract_no
```

```
WHERE Submittal_No = $submittal_no
```

-- Edit submittal

```
SELECT * FROM Submittal
```

```
WHERE Submittal_No = $submittal_no
```