CREATE DATABASE IF NOT EXISTS ber;

USE ber;

-- USERS

CREATE TABLE users (

id INT AUTO\_INCREMENT PRIMARY KEY,

username VARCHAR(255) NOT NULL,

password\_hash VARCHAR(255),

email VARCHAR(100),

role ENUM('user', 'manager', 'admin') NOT NULL,

is\_ldap TINYINT DEFAULT 0,

created\_at DATETIME DEFAULT CURRENT\_TIMESTAMP

);

-- PROJECTS

CREATE TABLE projects (

id INT AUTO\_INCREMENT PRIMARY KEY,

name VARCHAR(255),

description TEXT,

submitted\_by VARCHAR(255),

status ENUM('pending', 'approved', 'declined') DEFAULT 'pending',

created\_at DATETIME DEFAULT CURRENT\_TIMESTAMP,

approved\_by VARCHAR(255),

approved\_at DATETIME

);

-- TASKS

CREATE TABLE tasks (

id INT AUTO\_INCREMENT PRIMARY KEY,

name VARCHAR(255),

description TEXT,

project\_id INT

);

-- WORK ELEMENTS

CREATE TABLE work\_elements (

id INT AUTO\_INCREMENT PRIMARY KEY,

name VARCHAR(255),

description TEXT,

task\_id INT

);

-- BUDGETS

CREATE TABLE budgets (

id INT AUTO\_INCREMENT PRIMARY KEY,

work\_element\_id INT,

submitted\_by VARCHAR(255),

amount DECIMAL(15,2),

description TEXT,

status ENUM('pending', 'approved', 'declined') DEFAULT 'pending',

created\_at DATETIME DEFAULT CURRENT\_TIMESTAMP,

approved\_by VARCHAR(255),

approved\_at DATETIME

);

-- AFES (Authorization for Expenditure)

CREATE TABLE afes (

id INT AUTO\_INCREMENT PRIMARY KEY,

budget\_id INT,

afe\_title VARCHAR(255),

description TEXT,

submitted\_by VARCHAR(255),

created\_at DATETIME DEFAULT CURRENT\_TIMESTAMP,

status ENUM('pending', 'approved', 'declined') DEFAULT 'pending',

approved\_by VARCHAR(255),

approved\_at DATETIME,

amount DECIMAL(15,2),

activity\_description TEXT,

unit VARCHAR(50),

quantity DECIMAL(10,2),

unit\_price DECIMAL(10,2),

total\_invoiced DECIMAL(15,2) DEFAULT 0.00,

balance\_remaining DECIMAL(15,2) GENERATED ALWAYS AS (amount - total\_invoiced) STORED

);

-- INVOICES

CREATE TABLE invoices (

id INT AUTO\_INCREMENT PRIMARY KEY,

afe\_id INT,

invoice\_title VARCHAR(255),

invoice\_date DATE,

amount DECIMAL(15,2),

description TEXT,

file\_path VARCHAR(255),

submitted\_by VARCHAR(255),

status ENUM('pending','approved','declined','cancelled') DEFAULT 'pending',

created\_at DATETIME DEFAULT CURRENT\_TIMESTAMP,

approved\_by VARCHAR(255),

approved\_at DATETIME,

invoice\_number VARCHAR(50),

vendor VARCHAR(100),

user\_department VARCHAR(100),

contract\_number VARCHAR(100),

cancelled\_by VARCHAR(50),

cancelled\_at DATETIME

);

-- PRODUCTION

CREATE TABLE production (

id INT AUTO\_INCREMENT PRIMARY KEY,

project\_id INT,

price\_per\_barrel DECIMAL(10,2),

number\_of\_barrels INT,

production\_date DATE,

cost DECIMAL(15,2),

profit DECIMAL(15,2) GENERATED ALWAYS AS (price\_per\_barrel \* number\_of\_barrels - cost) STORED

); **SQL SCHEMA .**

afes activity\_description text YES

afes afe\_title varchar YES

afes amount decimal YES

afes approved\_at datetime YES

afes approved\_by varchar YES

afes balance\_remaining decimal YES

afes budget\_id int YES

afes created\_at datetime YES CURRENT\_TIMESTAMP

afes description text YES

afes id int NO

afes quantity decimal YES

afes status enum YES pending

afes submitted\_by varchar YES

afes total\_invoiced decimal YES 0.00

afes unit varchar YES

afes unit\_price decimal YES

budgets amount decimal YES

budgets approved\_at datetime YES

budgets approved\_by varchar YES

budgets created\_at datetime YES CURRENT\_TIMESTAMP

budgets description text YES

budgets id int NO

budgets status enum YES pending

budgets submitted\_by varchar YES

budgets work\_element\_id int YES

invoices afe\_id int YES

invoices amount decimal YES

invoices approved\_at datetime YES

invoices approved\_by varchar YES

invoices cancelled\_at datetime YES

invoices cancelled\_by varchar YES

invoices contract\_number varchar YES

invoices created\_at datetime YES CURRENT\_TIMESTAMP

invoices description text YES

invoices file\_path varchar YES

invoices id int NO

invoices invoice\_date date YES

invoices invoice\_number varchar YES

invoices invoice\_title varchar YES

invoices status enum YES pending

invoices submitted\_by varchar YES

invoices user\_department varchar YES

invoices vendor varchar YES

production cost decimal YES

production id int NO

production number\_of\_barrels int YES

production price\_per\_barrel decimal YES

production production\_date date YES

production profit decimal YES

production project\_id int YES

projects approved\_at datetime YES

projects approved\_by varchar YES

projects created\_at datetime YES CURRENT\_TIMESTAMP

projects description text YES

projects id int NO

projects name varchar YES

projects status enum YES pending

projects submitted\_by varchar YES

tasks description text YES

tasks id int NO

tasks name varchar YES

tasks project\_id int YES

users created\_at datetime YES CURRENT\_TIMESTAMP

users email varchar YES

users id int NO

users is\_ldap tinyint YES 0

users password\_hash varchar YES

users role enum NO

users username varchar NO

work\_elements description text YES

work\_elements id int NO

work\_elements name varchar YES

work\_elements task\_id int YES