CREATE TABLE meter\_info (service\_number INT PRIMARY KEY , meters\_reading INT NOT NULL);

CREATE TABLE users (userID INT PRIMARY KEY,name VARCHAR2(25) NOT NULL,password VARCHAR2(10),service\_number INTEGER, phone\_number INT,address VARCHAR2(52) ,is\_admin CHAR(1), FOREIGN KEY (service\_number) REFERENCES meter\_info(service\_number));

CREATE TABLE bills (billID INT PRIMARY KEY, name VARCHAR2(25) NOT NULL,service\_number INTEGER,payment\_method VARCHAR2(4),meter\_price INT NOT NULL,userID INT ,total\_price NUMBER,paying\_date DATE,FOREIGN KEY (userID) REFERENCES users(userID), FOREIGN KEY (service\_number) REFERENCES meter\_info(service\_number));

INSERT INTO meter\_info (meters\_reading, service\_number) VALUES (104,123);

INSERT INTO meter\_info (meters\_reading, service\_number) VALUES (401,456);

INSERT INTO meter\_info (meters\_reading, service\_number) VALUES (208,789);

INSERT INTO users (userid, address, is\_admin, name, password, phone\_number, service\_number) VALUES (1,'Masr Elqadima,Cairo','Y','Sohila metwaly','12332100s',0123456789,123);

INSERT INTO users (userid, address, is\_admin, name, password, phone\_number, service\_number) VALUES (2,'Obour city,Cairo','N','Bashar Mohamed','12332100',0123456789,456);

INSERT INTO users (userid, address, is\_admin, name, password, phone\_number, service\_number) VALUES (3,'Shobra,Cairo','Y','Bassant Nasser','123321',0123456789,789);

INSERT INTO bills (billid, meter\_price, name, payment\_method, service\_number, userid,total\_price, paying\_date) VALUES (1,50,'Sohila Metwaly','cash',123,1,5200,TO\_DATE('9/5/2024', 'MM/DD/YYYY'));

INSERT INTO bills (billid, meter\_price, name, payment\_method, service\_number, userid,total\_price, paying\_date) VALUES (2,45,'Bashar Mohamed','visa',456,2,18045,TO\_DATE('8/5/2024', 'MM/DD/YYYY'));

INSERT INTO bills (billid, meter\_price, name, payment\_method, service\_number, userid,total\_price, paying\_date) VALUES (3,40,'Bassant Nasser','cash',789,3,8302,TO\_DATE('7/5/2024', 'MM/DD/YYYY'));

CREATE OR REPLACE PROCEDURE get\_meters\_info(service\_no IN NUMBER,price OUT NUMBER,reading OUT NUMBER)

AS

BEGIN

SELECT meter\_price INTO price FROM bills WHERE service\_number = service\_no;

SELECT meters\_reading INTO reading FROM meter\_info WHERE service\_number = service\_no;

END get\_meters\_info;

/

CREATE OR REPLACE PROCEDURE add\_new\_bill(service\_no IN NUMBER,user\_name IN VARCHAR2,price IN NUMBER)

IS user\_id NUMBER;

max\_bill\_id NUMBER;

BEGIN

SELECT NVL(MAX(billID),0)+1 INTO max\_bill\_id FROM bills;

SELECT userID INTO user\_id FROM users WHERE service\_number = service\_no;

INSERT INTO bills (userid, name, total\_price, billid, service\_number) VALUES (user\_id,user\_name,price,max\_bill\_id, service\_no);

END add\_new\_bill;