**W4D1 Homework**

1. Design the tables in database, attention their relationship and the constraint (primary key, foreign key)

User ,Order,OrderItem

**CREATE TABLE USERS**

(USER\_ID NUMBER NOT NULL ,

FIRST\_NAME VARCHAR(15) NULL ,

LAST\_NAME VARCHAR(15) NULL,

ADDRESS VARCHAR (25) NULL,

MOBILE\_NUMBER VARCHAR2(11) NULL,

CONSTRAINT user\_pk PRIMARY KEY (USER\_ID)

);

COMMIT;

**CREATE TABLE ORDERS**

(ORDER\_ID NUMBER NOT NULL,

USER\_ID NUMBER(1,10) NOT NULL,

ORDER\_STATUS VARCHAR(20) NULL,

ORDER\_TOADRESS VARCHAR(20) NULL,

ORDER\_TOTAL NUMBER NULL,

CONSTRAINT fk\_orders

FOREIGN KEY (USER\_ID)

REFERENCES USERS(USER\_ID),

CONSTRAINT order\_pk PRIMARY KEY(ORDER\_ID)

);

COMMIT;

**CREATE TABLE ORDER\_ITEM**

(ORDER\_ITEM\_ID NUMBER NOT NULL,

ORDER\_ID NUMBER NOT NULL,

ITEM VARCHAR(20) NULL,

ITEM\_DESCRIPTION VARCHAR(20) NULL,

ITEM\_PRICE NUMBER NULL,

ITEM\_QUANTITY NUMBER NULL,

FOREIGN KEY (ORDER\_ID)

REFERENCES ORDERS (ORDER\_ID),

CONSTRAINT oder\_item\_id\_pk PRIMARY KEY (ORDER\_ITEM\_ID)

);

COMMIT;

1. What are DQL, DML, DDL and DCL for Database? And what their commands? And give examples for each one based the above tables “User”, “Order” and “OrderItem”.

**DQL (SELECT)**

SELECT DISTINCT FIRST\_NAME, LAST\_NAME, ADDRESS FROM USERS;

SELECT \* FROM ORDERS;

SELECT ORDER\_ID, ITEM\_DESCRIPTION,ITEM\_PRICE FROM ORDER\_ITEM ORDER BY ORDER\_ID;

**DML(INSERT, UPDATE, DELETE)**

INSERT INTO USERS (USER\_ID, FIRST\_NAME, LAST\_NAME, ADDRESS, MOBILE\_NUMBER) VALUES (1,'Alexis','Cuntapay','Paranque City','09112598564');

COMMIT;

DELETE FROM USERS WHERE USER\_ID='1';

UPDATE USERS SET first\_name='Alex';

INSERT INTO ORDERS (ORDER\_ID,USER\_ID, ORDER\_STATUS, ORDER\_TOADRESS, ORDER\_TOTAL)

VALUES (1,1,'Available','Pque City', 1);

DELETE FROM ORDERS WHERE ORDER\_ID=’1’;

UPDATE ORDERS SET ORDER\_STATUS='Not Available' WHERE ORDER\_ID='1'

INSERT INTO ORDER\_ITEM (ORDER\_ITEM\_ID, ORDER\_ID, ITEM, ITEM\_DESCRIPTION, ITEM\_PRICE,ITEM\_QUANTITY) VALUES (1,1,'Car','Auto',1,1);

DELETE FROM ORDER\_ITEM WHERE ITEM\_DESCRIPTION=’Auto’;

UPDATE ORDER\_ITEM SET ITEM=’Ball’;

**DDL (DROP, CREATE ,ALTER)**

DROP TABLE ORDER\_ITEM;

DROP TABLE ORDERS;

DROP TABLE USERS;

**CREATE TABLE USERS**

(USER\_ID NUMBER(1,10) NOT NULL ,

FIRST\_NAME VARCHAR(15) NULL ,

LAST\_NAME VARCHAR(15) NULL,

ADDRESS VARCHAR (25) NULL,

MOBILE\_NUMBER VARCHAR2(11) NULL,

CONSTRAINT user\_pk PRIMARY KEY (USER\_ID)

);

COMMIT;

**CREATE TABLE ORDERS**

(ORDER\_ID NUMBER NOT NULL,

USER\_ID NUMBER NOT NULL,

ORDER\_STATUS VARCHAR(20) NULL,

ORDER\_TOADRESS VARCHAR(20) NULL,

ORDER\_TOTAL NUMBER NULL,

CONSTRAINT fk\_orders

FOREIGN KEY (USER\_ID)

REFERENCES USERS(USER\_ID),

CONSTRAINT order\_pk PRIMARY KEY(ORDER\_ID)

);

COMMIT;

**CREATE TABLE ORDER\_ITEM**

(ORDER\_ITEM\_ID NUMBER NOT NULL,

ORDER\_ID NUMBER NOT NULL,

ITEM VARCHAR(20) NULL,

ITEM\_DESCRIPTION VARCHAR(20) NULL,

ITEM\_PRICE NUMBER NULL,

ITEM\_QUANTITY NUMBER NULL,

FOREIGN KEY (ORDER\_ID)

REFERENCES ORDERS (ORDER\_ID),

CONSTRAINT oder\_item\_id\_pk PRIMARY KEY (ORDER\_ITEM\_ID)

);

COMMIT;

ALTER TABLE USERS

ADD PASSWORD VARCHAR(45);

ALTER TABLE ORDERS

MODIFY ORDER\_STATUS VARCHAR(50);

ALTER TABLE ORDERS

MODIFY ORDER\_STATUS VARCHAR(60);

**DCL- grant revoke**

CREATE USER TUTOR IDENTIFIED BY oracle;

GRANT CONNECT, RESOURCE TO TUTOR;

COMMIT;

GRANT SELECT,INSERT,UPDATE,DELETE ON USERS TO TUTOR;

GRANT SELECT,INSERT,UPDATE,DELETE ON ORDERS TO TUTOR;

GRANT SELECT,INSERT,UPDATE,DELETE ON ORDER\_ITEM TO TUTOR;

COMMIT;

ROLLBACK;