W4D1 Homework

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

CREATE TABLE userHW (

user\_id INTEGER PRIMARY KEY,

user\_name VARCHAR(100),

first\_name VARCHAR(100),

last\_name VARCHAR(100),

pass\_word VARCHAR(100),

date\_created DATE

);

CREATE TABLE orderitemHW (

item\_id INTEGER PRIMARY KEY,

item\_name VARCHAR(100),

item\_desc VARCHAR(100),

item\_cost FLOAT,

date\_created DATE

);

CREATE TABLE orderHW (

order\_id INTEGER PRIMARY KEY,

item\_id INTEGER,

quantity INTEGER,

user\_id INTEGER,

date\_order DATE,

CONSTRAINT FK\_ITEM\_ID FOREIGN KEY (item\_id) REFERENCES orderitemHW(item\_id),

CONSTRAINT FK\_USER\_ID FOREIGN KEY (user\_id) REFERENCES userHW(user\_id)

);

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”.
2. Data Query Language(DQL) contains only one command – SELECT ,which used to retrive the data from database.

SELECT U.FIRST\_NAME,

I.ITEM\_NAME,

(O.QUANTITY \* I.ITEM\_COST) AS SUB\_COST

FROM ORDERHW O,

ORDERITEMHW I,

USERHW U

WHERE

O.ITEM\_ID = I.ITEM\_ID AND

O.USER\_ID = U.USER\_ID AND

O.DATE\_ORDER LIKE '%JUL%';

1. Data Manipulation Language (DML) - INSERT, SELECT, UPDATE, DELETE, Performing read-only queries

INSERT INTO USERHW VALUES (3,'MOLLA','MORENA','DELIKS','WALA','28-FEB-11');

INSERT INTO ORDERITEMHW VALUES (1,'AQUA','PURIFIED WATER',5.3,'22-JUL-01');

INSERT INTO ORDERHW VALUES (1,1,10,1,'26-APR-08');

1. Data Definition Language (DDL) – CREATE,DROP,ALTER,RENAME, defining data structures

RENAME orderHW TO ordersHW;

RENAME userHW TO usersHW;

RENAME orderitemHW TO itemHW;

1. Data Control Language (DCL) – GRANT,REVOKE, create privileges to users

GRANT SELECT ON orderHW TO DEQUIAL;

GRANT SELECT, INSERT, UPDATE, DELETE ON userHW TO public;

REVOKE ALL ON orderitemHW FROM DEQUIAL;