



Lab-Assignment

Name : Muhammad Awais
Section : BCS-4B
Registration# : FA19-BCS-072
Subject : Database Management System
Submitted To : Sir Waseem Khan

```

--CREATING A DATABASE FOR E-COMMERCE STORE.
CREATE DATABASE E_COMMERCE_STORE;

USE E_COMMERCE_STORE;

--CREATING TABLE FOR STORING USERS LOGIN INFORMATION.
CREATE TABLE user_login
    (usr_name varchar(30),
     usr_email varchar(30),
     usr_password varchar(16));
ALTER TABLE user_login ALTER COLUMN usr_name varchar(30) NOT NULL;
ALTER TABLE user_login ADD PRIMARY KEY (usr_name);

--CREATING TABLE FOR STORING USERS ADDRESS INFORMATION.

CREATE TABLE user_info
    (phone varchar(12),
     address1 varchar(50),
     address2 varchar(50),
     reg_date varchar(10));
--ADDING usr_name ATTRIBUTE IN user_info TABLE

ALTER TABLE user_info ADD usr_name varchar(30);

--ADDING DEFAULT CONSTRAINT IN user_info
ALTER TABLE user_info ADD CONSTRAINT df_date DEFAULT GETDATE() FOR reg_date;

ALTER TABLE user_info ALTER COLUMN reg_date VARCHAR(12);

ALTER TABLE user_info ADD CONSTRAINT fk_username
    FOREIGN KEY (usr_name) REFERENCES user_login(usr_name);

--CREATING TABLE FOR STORING SALES INFORMATION

CREATE TABLE sales(transaction_id int,product_id int,quantity int);

--CREATING TABLE FOR STORING TRANSACTIONS

CREATE TABLE transactions
    (transaction_id int primary key,
     tr_date varchar(20),
     buyer_username varchar(30),
     amount int);

--FOR SELLER RECORDS

--CREATING A SELLER TABLE FOR STORING SELLERS INFORMATION

CREATE TABLE sellers
    (product_id int primary key,
     seller_username varchar(30));

--CREATING A TABLE FOR STORING PRODUCTS INFORMATION

CREATE TABLE products
    (product_id int,
     product_name varchar(50),

```

```

        quantity int,
        price int,
        adding_date varchar(12),
        category int);

--CREATING A TABLE FOR STORING CATEGORIES

CREATE TABLE category (category INT PRIMARY KEY, category_name VARCHAR(20));

--INSERTING DATA IN TABLES

--INSERTING NEW USER LOGIN INFO
INSERT INTO user_login (usr_name,usr_email,usr_password)
VALUES ('m_awaais','awaixkhan3@gmail.com','~!@#%$^&*()');
INSERT INTO user_login (usr_name,usr_email,usr_password)
VALUES ('zeeshan38','zeeshan_ahmed@gmail.com','123456789');
INSERT INTO user_login (usr_name,usr_email,usr_password)
VALUES ('dr_shams','shamsurrehman1@gmail.com','adj893ed23');
INSERT INTO user_login (usr_name,usr_email,usr_password)
VALUES ('haseeb1','haseeb_ahmed98@yahoo.com','d782ujd23');
INSERT INTO user_login (usr_name,usr_email,usr_password)
VALUES ('nazir21','khan_nazir322@gmail.com','d9c8234f347');
INSERT INTO user_login (usr_name,usr_email,usr_password)
VALUES ('aamir_8','aamir.shehzad@yahoo.com','sd283d2djd');
INSERT INTO user_login (usr_name,usr_email,usr_password)
VALUES ('adeel155','adeel_ahmed21@gmail.com','asxy7adawd2');
INSERT INTO user_login (usr_name,usr_email,usr_password)
VALUES ('usman_x','m_usman09@gmail.com','378261379');
INSERT INTO user_login (usr_name,usr_email,usr_password)
VALUES ('laiba_2','laiba_khan786@gmail.com','25376laiba');
INSERT INTO user_login (usr_name,usr_email,usr_password)
VALUES ('ahsan90','ahsan_p2@gmail.com','@hsan23712');

SELECT * FROM user_login ORDER BY usr_name DESC

--INSERTING USER_ADDRESS INFORMATION
ALTER TABLE user_info ADD CONSTRAINT df_address2 DEFAULT NULL FOR address2;

INSERT INTO user_info (phone,address1,address2,usr_name,reg_date)
VALUES ('0306-5396548','Mirza Village, Attock City','Takbeer Colony, Attock City','m_awaais','04-06-2021');
INSERT INTO user_info (phone,address1,address2,usr_name)
VALUES ('0309-2178321','Piplan, Mianwali','Piplan,Mianwali','zeeshan38');
INSERT INTO user_info (phone,address1,usr_name)
VALUES ('0312-5085876','Hazro,Punjab Pakistan','dr_shams');
INSERT INTO user_info (phone,address1,usr_name)
VALUES ('0310-2177651','Tehsil Jand, Distt Attock, Pakistan','haseeb1');
INSERT INTO user_info (phone,address1,usr_name)
VALUES ('0301-8595912','Sanjwal Cantt, Attock City','nazir21');
INSERT INTO user_info (phone,address1,usr_name)
VALUES ('0310-9012907','PNS Shifa, Karachi','aamir_8');
INSERT INTO user_info (phone,address1,usr_name)
VALUES ('0300-5283322','COMSATS University, Attock Campus','adeel155');
INSERT INTO user_info (phone,address1,usr_name)
VALUES ('0343-3172836','Rifa International, Lahore','usman_x');

```

```

INSERT INTO user_info (phone,address1,usr_name)
VALUES ('0324-5303409','NUST University, Islamabad','laiba_2');
INSERT INTO user_info (phone,address1,usr_name)
VALUES ('0300-3456128','POF Wah Cantt','ahsan90');

SELECT * FROM user_info;

SELECT user_login.usr_name AS Username,usr_email AS Email,address1 AS Address,reg_date AS
Registration_Date FROM user_login
FULL JOIN user_info ON user_login.usr_name = user_info.usr_name;

--INSERTING DATA FOR A SELLER

--ATTRIBUTES IN SELLER = product_id, seller_username

--ADDING FOREIGN KEY THAT REFERS TO user_login(usr_name)

ALTER TABLE sellers ADD FOREIGN KEY (seller_username) REFERENCES user_login(usr_name);
ALTER TABLE sellers ALTER COLUMN product_id INT NOT NULL;
--NOW INSERTING RECORD IN sellers

INSERT INTO sellers (seller_username,product_id) VALUES('m_awaais',598);
INSERT INTO sellers (seller_username,product_id) VALUES('usman_x',10281);
INSERT INTO sellers (seller_username,product_id) VALUES('haseeb1',19902);
INSERT INTO sellers (seller_username,product_id) VALUES('adeel55',12732);

SELECT * FROM sellers;

--INSERTING PRODUCTS CATEGORIES
ALTER TABLE category ALTER COLUMN category INT NOT NULL;

INSERT INTO category (category,category_name) VALUES(1,'Electronics');
INSERT INTO category (category,category_name) VALUES(2,'Garments');
INSERT INTO category (category,category_name) VALUES(3,'Footwear');
INSERT INTO category (category,category_name) VALUES(4,'Toys');
INSERT INTO category (category,category_name) VALUES(5,'Bags');

SELECT * FROM products;
--INSERTING PRODUCT DETAILS IN products TABLE
ALTER TABLE products ADD FOREIGN KEY (category) REFERENCES category(category);
ALTER TABLE products ADD FOREIGN KEY (product_id) REFERENCES sellers(product_id);
ALTER TABLE products ADD CONSTRAINT df_adding_date DEFAULT GETDATE() FOR adding_date;

INSERT INTO products (product_id,product_name,quantity,price,adding_date,category)
VALUES (598,'Washing machine',10,20000,'04-06-2021',1);
INSERT INTO products (product_id,product_name,quantity,price,category)
VALUES (10281,'Nike Leather Bag ZX',100,2000,5);
INSERT INTO products (product_id,product_name,quantity,price,category)
VALUES (12732,'Blue T-Shirt For Men',120,1750,2);
INSERT INTO products (product_id,product_name,quantity,price,category)
VALUES (19902,'Adidas Sneakers',300,1999,3);

SELECT * FROM products LEFT JOIN category ON products.category = category.category;

--INSERTING DATA IN SALES and TRANSACTIONS TABLE

```

```
ALTER TABLE sales ADD FOREIGN KEY (transaction_id) REFERENCES
transactions(transaction_id);
```

```
ALTER TABLE transactions ADD FOREIGN KEY (buyer_username) REFERENCES
user_login(usr_name);
```

```
--FIRST I WILL ADD A TRANSACTION (COMPLETE ORDER WHICH MAY CONTAINS ONE OR MORE PRODUCTS)
```

```
--ADDING TRANSACTION
```

```
INSERT INTO transactions (transaction_id,tr_date,buyer_username,amount)
VALUES (1001,'04-06-2021','m_awaais',40000);
```

```
--INSERTING SALES RECORD WHICH MAY BE A TRANSACTION RECORD THAT HOW MUCH ITEMS WERE
BOUGHT IN A TRANSACTION
```

```
INSERT INTO sales (product_id,quantity,transaction_id) VALUES(598,2,1001);
```

```
SELECT * FROM sales LEFT JOIN transactions ON sales.transaction_id =
transactions.transaction_id;
```

```
--SELECTING DATA FROM PRODUCTS TABLE USING CATEGORY
```

```
--SHOW RECORDS OF SELLER BY PRODUCT
```

```
SELECT user_login.usr_name AS Username,
       user_login.usr_email AS Email,
       sellers.product_id AS Product_ID,
       products.product_name AS Product_Name,
       products.price AS Price,
       products.quantity AS Quantity,
       products.category AS Category
FROM user_login FULL JOIN sellers ON
sellers.seller_username = user_login.usr_name
FULL JOIN products ON products.product_id = sellers.product_id
WHERE products.product_id IS NOT NULL;
```