DATAWARE HOUSING AND DATA MINING

ASSIGNMENT 1

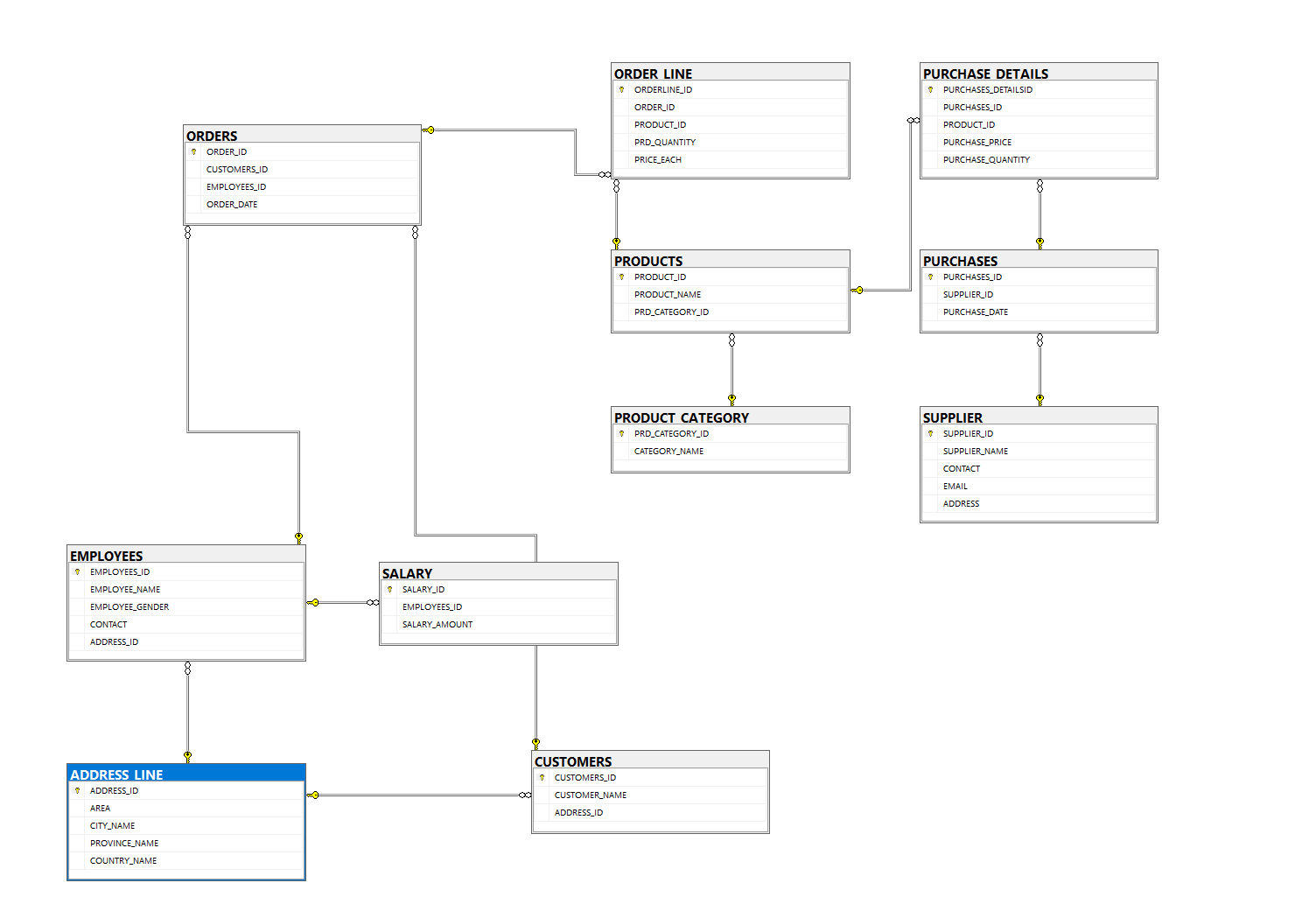
GROUP MEMBERS

MUHAMMAD BILAL AHMED (FA20-BCS-041)

MUHAMMAD SALMAN (SP20-BCS-131)

1. **Textual description**

The database is to be designed for an artificial jewelry shop. The information required includes details of supplier, details of products purchased from supplier, description of Products, details of orders like customer name, sold quantity, product name, employee name and order date. Customer places order by physically visiting shop. The shop also keeps record of all employees to monitor the progress of their business.

1. **Normalized ERD and Database diagram from SQL server**
2. **Implementation of ERD in SQL server**

CREATE DATABASE DWDM\_PROJECT

USE DWDM\_PROJECT

1. **Supplier**

CREATE TABLE SUPPLIER

(

SUPPLIER\_ID INT NOT NULL PRIMARY KEY,

SUPPLIER\_NAME VARCHAR(50) NOT NULL,

CONTACT VARCHAR(50),

EMAIL VARCHAR(50),

ADDRESS VARCHAR(200),

)

**Bulk Query to insert data from excel file**

Bulk insert DWDM\_PROJECT.dbo.SUPPLIER from 'C:\Users\Muhammad Bilal Ahmed\Documents\DW Project\SqlData\SUPPLIER.csv'

with (

fieldterminator=',',

rowterminator='\n',

firstrow=2

)

1. **Purchases**

CREATE TABLE PURCHASES

(

PURCHASES\_ID INT NOT NULL PRIMARY KEY,

SUPPLIER\_ID INT FOREIGN KEY REFERENCES SUPPLIER(SUPPLIER\_ID),

PURCHASE\_DATE DATE NOT NULL,

)

**Bulk Query to insert data from excel file**

Bulk insert DWDM\_PROJECT.dbo.PURCHASES from 'C:\Users\Muhammad Bilal Ahmed\Documents\DW Project\SqlData\PURCHASES.csv'

with (

fieldterminator=',',

rowterminator='\n',

firstrow=2

)

select \* from PURCHASES

1. **Category**

CREATE TABLE PRODUCT\_CATEGORY

(

PRD\_CATEGORY\_ID INT NOT NULL PRIMARY KEY,

CATEGORY\_NAME VARCHAR(50) NOT NULL,

)

**Bulk Query to insert data from excel file**

Bulk insert DWDM\_PROJECT.dbo. PRODUCT\_CATEGORY from 'C:\Users\Muhammad Bilal Ahmed\Documents\DW Project\SqlData\PRODUCT\_CATEGORY.csv'

with (

fieldterminator=',',

rowterminator='\n',

firstrow=2

)

1. **Products**

CREATE TABLE PRODUCTS

(

PRODUCT\_ID INT NOT NULL PRIMARY KEY,

PRODUCT\_NAME VARCHAR(50) NOT NULL,

PRD\_CATEGORY\_ID INT NOT NULL FOREIGN KEY REFERENCES PRODUCT\_CATEGORY(PRD\_CATEGORY\_ID),

)

**Bulk Query to insert data from excel file**

Bulk insert DWDM\_PROJECT.dbo.PRODUCTS from 'C:\Users\Muhammad Bilal Ahmed\Documents\DW Project\SqlData\PRODUCTS .csv'

with (

fieldterminator=',',

rowterminator='\n',

firstrow=2

)

1. **Purchases details**

CREATE TABLE PURCHASE\_DETAILS

(

PURCHASES\_DETAILSID INT NOT NULL PRIMARY KEY,

PURCHASES\_ID INT FOREIGN KEY REFERENCES PURCHASES(PURCHASES\_ID),

PRODUCT\_ID INT FOREIGN KEY REFERENCES PRODUCTS(PRODUCT\_ID),

PURCHASE\_PRICE INT NOT NULL,

PURCHASE\_QUANTITY INT NOT NULL,

)

**Bulk Query to insert data from excel file**

Bulk insert DWDM\_PROJECT.dbo.PURCHASE\_DETAILS from 'C:\Users\Muhammad Bilal Ahmed\Documents\DW Project\SqlData\PURCHASE\_DETAILS.csv'

with (

fieldterminator=',',

rowterminator='\n',

firstrow=2

)

1. **Address**

CREATE TABLE ADDRESS\_LINE

(

ADDRESS\_ID INT NOT NULL PRIMARY KEY,

AREA VARCHAR(100),

CITY\_NAME VARCHAR(50) NOT NULL,

PROVINCE\_NAME VARCHAR(50) NOT NULL,

COUNTRY\_NAME VARCHAR(50) NOT NULL,

)

**Bulk Query to insert data from excel file**

Bulk insert DWDM\_PROJECT.dbo.ADDRESS\_LINE from 'C:\Users\Muhammad Bilal Ahmed\Documents\DW Project\SqlData\ADDRESS\_LINE.csv'

with (

fieldterminator=',',

rowterminator='\n',

firstrow=6

)

1. **Customers**

CREATE TABLE CUSTOMERS

(

CUSTOMERS\_ID INT NOT NULL PRIMARY KEY,

CUSTOMER\_NAME VARCHAR(50) NOT NULL,

ADDRESS\_ID INT FOREIGN KEY REFERENCES ADDRESS\_LINE(ADDRESS\_ID),

)

**Bulk Query to insert data from excel file**

Bulk insert DWDM\_PROJECT.dbo.CUSTOMERS from 'C:\Users\Muhammad Bilal Ahmed\Documents\DW Project\SqlData\CUSTOMERS.csv'

with (

fieldterminator=',',

rowterminator='\n',

firstrow=2

)

1. **Employees**

CREATE TABLE EMPLOYEES

(

EMPLOYEES\_ID INT NOT NULL PRIMARY KEY,

EMPLOYEE\_NAME VARCHAR(50) NOT NULL,

EMPLOYEE\_GENDER VARCHAR(10) NOT NULL,

CONTACT VARCHAR(50),

ADDRESS\_ID INT FOREIGN KEY REFERENCES ADDRESS\_LINE(ADDRESS\_ID),

)

**Bulk Query to insert data from excel file**

Bulk insert DWDM\_PROJECT.dbo.EMPLOYEES from 'C:\Users\Muhammad Bilal Ahmed\Documents\DW Project\SqlData\EMPLOYEES.csv'

with (

fieldterminator=',',

rowterminator='\n',

firstrow=2

)

1. **Orders**

CREATE TABLE ORDERS

(

ORDER\_ID INT NOT NULL PRIMARY KEY,

CUSTOMERS\_ID INT FOREIGN KEY REFERENCES CUSTOMERS(CUSTOMERS\_ID),

EMPLOYEES\_ID INT FOREIGN KEY REFERENCES EMPLOYEES(EMPLOYEES\_ID),

ORDER\_DATE DATE NOT NULL,

)

**Bulk Query to insert data from excel file**

Bulk insert DWDM\_PROJECT.dbo.ORDERS from 'C:\Users\Muhammad Bilal Ahmed\Documents\DW Project\SqlData\ORDERS .csv'

with (

fieldterminator=',',

rowterminator='\n',

firstrow=2

)

1. **Orderline**

CREATE TABLE ORDER\_LINE

(

ORDERLINE\_ID INT NOT NULL PRIMARY KEY,

ORDER\_ID INT FOREIGN KEY REFERENCES ORDERS (ORDER\_ID),

PRODUCT\_ID INT FOREIGN KEY REFERENCES PRODUCTS(PRODUCT\_ID),

PRD\_QUANTITY INT NOT NULL,

PRICE\_EACH INT NOT NULL,

)

**Bulk Query to insert data from excel file**

Bulk insert DWDM\_PROJECT.dbo.ORDER\_LINE from 'C:\Users\Muhammad Bilal Ahmed\Documents\DW Project\SqlData\ORDER\_LINE.csv'

with (

fieldterminator=',',

rowterminator='\n',

firstrow=2

)

1. **Salary**

CREATE TABLE SALARY

(

SALARY\_ID INT NOT NULL PRIMARY KEY,

EMPLOYEES\_ID INT FOREIGN KEY REFERENCES EMPLOYEES(EMPLOYEES\_ID),

SALARY\_AMOUNT MONEY NOT NULL,

)

**Bulk Query to insert data from excel file**

Bulk insert DWDM\_PROJECT.dbo.SALARY from 'C:\Users\Muhammad Bilal Ahmed\Documents\DW Project\SqlData\SALARY .csv'

with (

fieldterminator=',',

rowterminator='\n',

firstrow=6

)