

Team number: Team 1

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Task C

SQL files:

- create.sql

```
/*CREATE SCHEMA 4347g1;*/  
USE 4347g1; /*Name of database, assumed already created based on assignment  
description. If database does not exist, remove the quotes from the first line. */  
START TRANSACTION; /*start of commit*/  
SET autocommit = 0; /*Makes sure all statements are executed in a single commit,  
makes it easier for version control*/  
SET unique_checks = 0; /*Overrides error handling for unique constraint*/  
SET foreign_key_checks = 0; /*Overrides error handling for foreign key  
constraint*/
```

```
CREATE TABLE CATEGORY(  
    CategoryID INT NOT NULL DEFAULT '0',  
    CategoryName varchar(50) NOT NULL DEFAULT 'No Category',  
    CONSTRAINT PK_Category PRIMARY KEY (CategoryID)  
);  
  
CREATE TABLE PRODUCT(  
    ProductID INT NOT NULL,  
    CategoryID INT NOT NULL DEFAULT '0',  
    ProductName varchar(150) NOT NULL DEFAULT 'Discontinued',  
    ProductDesc varchar(400),  
    UnitMeasurement varchar(20) DEFAULT 'Units',  
    CONSTRAINT PK_Product PRIMARY KEY (ProductID),  
    CONSTRAINT FK_Product_Category FOREIGN KEY (CategoryID) REFERENCES  
CATEGORY(CategoryID)  
    ON DELETE SET DEFAULT  
    ON UPDATE CASCADE  
);
```

```
CREATE TABLE ITEM(  
    ItemID INT NOT NULL,  
    ProductID INT NOT NULL DEFAULT '0',  
    UnitQuantity INT,  
    PPU FLOAT (5,3),  
    AvailableStock INT,
```

```

        CONSTRAINT PK_Item PRIMARY KEY (ItemID),
        CONSTRAINT FK_Item_Product FOREIGN KEY (ProductID) REFERENCES
PRODUCT(ProductID)
        ON DELETE SET DEFAULT
        ON UPDATE CASCADE
    );

CREATE TABLE CUSTOMER(
    CustomerID INT NOT NULL,
    FName varchar(20),
    MInit char(1),
    LName varchar(20),
    Email varchar(100) NOT NULL,
    PhoneNumber varchar(10),
    Address varchar(200),
    CONSTRAINT PK_Customer PRIMARY KEY (CustomerID),
    CONSTRAINT Unique_Email UNIQUE (Email)
);

CREATE TABLE EMPLOYEE(
    EmployeeID INT NOT NULL,
    FName varchar(20),
    MInit char(1),
    LName varchar(20),
    Title varchar(50),
    Email varchar(200),
    PhoneNumber varchar(10),
    CONSTRAINT PK_Employee PRIMARY KEY (EmployeeID),
    CONSTRAINT Unique_Email UNIQUE (Email),
    CONSTRAINT Unique_PhoneNumber UNIQUE (PhoneNumber)
);

CREATE TABLE ORDERS(
    OrderID INT NOT NULL,
    CustomerID INT,
    FulfilledBy INT,
    DeliveryAddress varchar(200) NOT NULL,
    OrderedOn TIMESTAMP NOT NULL,
    DeliveryEstimate TIMESTAMP,
    OrderStatus varchar(20) NOT NULL DEFAULT 'Order Placed',
    CONSTRAINT PK_Orders PRIMARY KEY (OrderID),
    CONSTRAINT FK_Orders_Customer FOREIGN KEY (CustomerID) REFERENCES
CUSTOMER(CustomerID)
        ON DELETE SET NULL
        ON UPDATE RESTRICT,
    CONSTRAINT FK_Orders_Employee FOREIGN KEY (FulfilledBy) REFERENCES
EMPLOYEE(EmployeeID)

```

```

        ON DELETE SET NULL
        ON UPDATE RESTRICT
    );

CREATE TABLE INVOICE(
    InvoiceID INT NOT NULL,
    OrderID INT,
    CONSTRAINT PK_Invoice PRIMARY KEY (InvoiceID),
    CONSTRAINT FK_Invoice_Orders FOREIGN KEY (OrderID) REFERENCES
ORDERS(OrderID)
    ON DELETE CASCADE
    ON UPDATE RESTRICT
);

CREATE TABLE ITEMIZED_RECEIPT(
    InvoiceID INT,
    ItemID INT,
    ItemQuantity INT NOT NULL,
    CONSTRAINT PK_Receipt PRIMARY KEY (InvoiceID, ItemID),
    CONSTRAINT FK_Receipt_Invoice FOREIGN KEY (InvoiceID) REFERENCES
INVOICE(InvoiceID)
    ON DELETE CASCADE
    ON UPDATE RESTRICT,
    CONSTRAINT FK_Receipt_Item FOREIGN KEY (ItemID) REFERENCES ITEM(ItemID)
    ON DELETE CASCADE
    ON UPDATE RESTRICT
);

SET unique_checks = 1; /*Re-enables error handling for unique constraint*/
SET foreign_key_checks = 1; /*Re-enables error handling for foreign key constraint*/
COMMIT; /*End of transaction*/

```

- load.sql

*/*TO IMPLEMENT - Replace 'C:/ProgramData/...' with whatever directory is set as your secure-file-priv for the server.*

Folder can be located via:

```
SELECT @@secure_file_priv;
```

NOTE mySQL does not interpret \ for file systems.

ALL instances of \'\' must be replaced with '/\'.

**/*

```
USE 4347g1;
```

```
START TRANSACTION; /*start of commit*/
```

```
SET autocommit = 0; /*Makes sure all statements are executed in a single commit, makes it easier for version control*/
```

```
SET unique_checks = 0; /*Overrides error handling for unique constraint*/
```

```
SET foreign_key_checks = 0; /*Overrides error handling for foreign key constraint*/
```

```
LOAD DATA
```

```
INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/b2b_db(category).csv'
```

```
INTO TABLE CATEGORY
```

```
FIELDS TERMINATED BY ','
```

```
LINES TERMINATED BY '\n'
```

```
IGNORE 1 ROWS;
```

```
LOAD DATA
```

```
INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/b2b_db(product).csv'
```

```
INTO TABLE PRODUCT
```

```
FIELDS TERMINATED BY ','
```

```
ENCLOSED BY '"' /*special case since 'ProductDescription' is several sentences.*/
```

```
LINES TERMINATED BY '\n'
```

```
IGNORE 1 ROWS;
```

```
LOAD DATA
```

```
INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/b2b_db(item).csv'
```

```
INTO TABLE ITEM
```

```
FIELDS TERMINATED BY ','
```

```
LINES TERMINATED BY '\n'
```

```
IGNORE 1 ROWS;
```

```
LOAD DATA
```

```
INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/b2b_db(customer).csv'
```

```
INTO TABLE CUSTOMER
```

```
FIELDS TERMINATED BY ','
```

```
LINES TERMINATED BY '\n'
```

```
IGNORE 1 ROWS;
```

LOAD DATA

```
INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/b2b_db(employee).csv'  
INTO TABLE EMPLOYEE  
FIELDS TERMINATED BY ','  
LINES TERMINATED BY '\n'  
IGNORE 1 ROWS;
```

LOAD DATA

```
INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/b2b_db(orders).csv'  
INTO TABLE ORDERS  
FIELDS TERMINATED BY ','  
LINES TERMINATED BY '\n'  
IGNORE 1 ROWS;
```

LOAD DATA

```
INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/b2b_db(invoice).csv'  
INTO TABLE INVOICE  
FIELDS TERMINATED BY ','  
LINES TERMINATED BY '\n'  
IGNORE 1 ROWS;
```

LOAD DATA

```
INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/b2b_db(itemized_receipt).csv'  
INTO TABLE ITEMIZED_RECEIPT  
FIELDS TERMINATED BY ','  
LINES TERMINATED BY '\n'  
IGNORE 1 ROWS;
```

```
SET unique_checks = 1; /*Re-enables error handling for unique constraint*/  
SET foreign_key_checks = 1; /*Re-enables error handling for foreign key constraint*/  
COMMIT; /*End of transaction */
```

Data files (8 tables):

- b2b_db(category).csv (5x2):

CategoryID,CategoryName

1,Pens
2,Pencils
3,Paper
4,Notebooks
5,Markers
6,Folders

CategoryID	CategoryName
1	Pens
2	Pencils
3	Paper
4	Notebooks
5	Markers
6	Folders

- b2b_db(customer).csv (10x7)

CustomerID,FName,MInit,LName,Email,PhoneNumber,Address

1,John,N,Smith,js20242@hotmail.com,9401234567,1234 November St. Richardson TX 75080
2,Jill,M,Smith,jill_sm@gmail.com,9721234567,1234 November St. Richardson TX 75080
3,Faucibus,O,Luctus,faucibus.orci.luctus@hotmail.net,1465956861,6324 Felis. Avenue Los Angeles CA 95321
4,Aenea,,Newton,aenean@hotmail.com,3381593300,591-3108 Sit Rd. Omaha NE 68007
5,Dylan,T,Onec,donec@google.com,668115053,Ap #790-7683 Fusce Ave Wichita KS 64597
6,Neque,P,Enteseque,neque.pellentesque@protonmail.edu,7823650348,Ap #460-1412 Vulputate St. Kirkwall OH 41080
7,Euismod,U,Nullam,euismod.urna.nullam@google.net,9453519837,350 Comet Blvd. Paris TX 75005
8,Duis,,Volutpat,duis.volutpat@outlook.ca,7678777820,859 Porttitor Avenue Polynski NC 51354
9,Quis,E,Pede,quis.pede@yahoo.c,7460103174,1733 Diam St. Rocca Massima PA 38296
10,Sid,E,Davis,sed@outlook.ca,3638632655,609-7590 Nisl. Ave Aylesbury TX 71132

CustomerID	FName	MInit	LName	Email	PhoneNumber	Address			
1	John	N	Smith	js20242@hotmail.com	9401234567	1234 November	St. Richardson TX	75080	
2	Jill	M	Smith	jill_sm@gmail.com	9721234567	1234 November	St. Richardson TX	75080	
3	Faucibus	O	Luctus	faucibus.orci.luctus@hotmail.net	1465956861	6324 Felis. Avenue	Los Angeles CA	95321	
4	Aenea		Newton	aenean@hotmail.com	3381593300	591-3108 Sit Rd.	Omaha NE	68007	
5	Dylan	T	Onec	donec@google.com	668115053	Ap #790-7683	Fusce Ave Wichita KS	64597	
6	Neque	P	Enteseque	neque.pellentesque@protonmail.edu	7823650348	Ap #460-1412	Vulputate St. Kirkwall OH	41080	
7	Euismod	U	Nullam	euismod.urna.nullam@google.net	9453519837	350 Comet Blvd.	Paris TX	75005	
8	Duis		Volutpat	duis.volutpat@outlook.ca	7678777820	859 Porttitor Avenue	Polynski NC	51354	
9	Quis	E	Pede	quis.pede@yahoo.c	7460103174	1733 Diam St.	Rocca Massima PA	38296	
10	Sid	E	Davis	sed@outlook.ca	3638632655	609-7590 Nisl. Ave	Aylesbury TX	71132	

- b2b_db(employee).csv (10x7)

```
EmployeeID,FName,MInit,LName,Title,Email,PhoneNumber
1,Ethan,V,Hahn,CEO,ethan.hann@b2b.com,8918847336
2,Diana,A,Carrillo,VP,diana.carrillo@b2b.com,8238972250
3,Blake,B,Abbott,Delivery Associate,blake.abbott@b2b.com,7489439380
4,Abeel,C,Wheeler,DBA,abeel.wheeler@b2b.com,7287281697
5,Ina,D,Owens,Warehouse Specialist,ina.owens@b2b.com,9342258367
6,Camille,E,Butler,Marketing Associate,camille.butler@b2b.com,4366637505
7,Naro,F,Lowe,IT,naro.lowe@b2b.com,8429607580
8,Gretchen,G,Langley,Temporary Worker,gretchen.langley@b2b.com,7634396009
9,Arsenio,H,Wyatt,Delivery Associate,arsenio.wyatt@b2b.com,1607208354
10,Amity,I,Gaines,Warehouse Specialist,amity.gaines@b2b.com,8572169365
```

EmployeeID	FName	MInit	LName	Title	Email	PhoneNumber
1	Ethan	V	Hahn	CEO	ethan.hann@b2b.com	8918847336
2	Diana	A	Carrillo	VP	diana.carrillo@b2b.com	8238972250
3	Blake	B	Abbott	Delivery Associate	blake.abbott@b2b.com	7489439380
4	Abeel	C	Wheeler	DBA	abeel.wheeler@b2b.com	7287281697
5	Ina	D	Owens	Warehouse Specialist	ina.owens@b2b.com	9342258367
6	Camille	E	Butler	Marketing Associate	camille.butler@b2b.com	4366637505
7	Naro	F	Lowe	IT	naro.lowe@b2b.com	8429607580
8	Gretchen	G	Langley	Temporary Worker	gretchen.langley@b2b.com	7634396009
9	Arsenio	H	Wyatt	Delivery Associate	arsenio.wyatt@b2b.com	1607208354
10	Amity	I	Gaines	Warehouse Specialist	amity.gaines@b2b.com	8572169365

- b2b_db(product).csv (16x5)

```
ProductID,CategoryID,ProductName,ProductDesc,UnitMeasurement
1,1,Red Ballpoint Pens,"Smooth-writing pens that deliver bold red ink for clear, vibrant notes and signatures.",Piece
2,4,Spiral Notebook Wide Ruled 100pg,"Versatile notebooks featuring wide-ruled pages, perfect for school or personal use",Piece
3,5,Chisel Tip Board Markers,"Versatile markers with a chisel tip for precise lines and bold strokes on whiteboards and flip charts.",Piece
4,2,Mechanical Pencils 0.7mm,"Convenient pencils that offer consistent 0.7mm lead for fine, precise writing without the need for sharpening",Piece
5,1,Black Ballpoint Pens,"Reliable pens that provide smooth, consistent black ink for everyday writing tasks.",Piece
6,3,Heavy Duty College Ruled Paper,"Durable, thick paper designed for college students, featuring standard college ruling for neat note-taking.",Sheet
7,5,Yellow Highlighters,"Bright yellow highlighters ideal for marking important
```

text and making notes stand out.",Piece

8,2,Wooden Pencils,"Classic wooden pencils that can be easily sharpened for a fine point and precise writing.",Piece

9,3,Lightweight Graph Paper,"Ideal for math and design work, this graph paper features a light grid for easy plotting and drawing.",Sheet

10,6,Manilla Tab Folders,"Sturdy folders with tabs for easy organization and categorization of documents.",Piece

11,1,Gel Pens Assorted Colors,"Smooth-flowing gel pens in a variety of colors, perfect for adding flair to writing and artwork.",Piece

12,4,Composition Notebook College Ruled 80pg,"Classic notebooks with college-ruled pages, perfect for students and writers alike.",Piece

13,4,Spiral Notebook College Ruled 100pg,"Convenient spiral-bound notebooks featuring college-ruled lines for organized note-taking.",Piece

14,2,Colored Pencils Assorted,"A set of vibrant colored pencils for creative projects, drawing, and coloring activities.",Piece

15,3,Lightweight Printer Paper,"Standard printer paper that's lightweight and perfect for everyday printing needs.",Sheet

16,5,Fine Tip Black Permanent Markers,"Precision markers with fine tips for detailed writing and marking that won't fade or wash away.",Piece

ProductID	CategoryID	ProductName	ProductDesc	UnitMeasurement	
1	1	Red Ballpoint Pens	Smooth-writing pens that deli	Piece	
2	4	Spiral Notebook Wide Ruled 100pg	Versatile notebooks featuring	Piece	
3	5	Chisel Tip Board Markers	Versatile markers with a chise	Piece	
4	2	Mechanical Pencils 0.7mm	Convenient pencils that offer	Piece	
5	1	Black Ballpoint Pens	Reliable pens that provide sm	Piece	
6	3	Heavy Duty College Ruled Paper	Durable, thick paper designec	Sheet	
7	5	Yellow Highlighters	Bright yellow highlighters ide	Piece	
8	2	Wooden Pencils	Classic wooden pencils that c	Piece	
9	3	Lightweight Graph Paper	Ideal for math and design wor	Sheet	
10	6	Manilla Tab Folders	Sturdy folders with tabs for ea	Piece	
11	1	Gel Pens Assorted Colors	Smooth-flowing gel pens in a	Piece	
12	4	Composition Notebook College Ruled 8	Classic notebooks with colleg	Piece	
13	4	Spiral Notebook College Ruled 100pg	Convenient spiral-bound note	Piece	
14	2	Colored Pencils Assorted	A set of vibrant colored pencil	Piece	
15	3	Lightweight Printer Paper	Standard printer paper that's	Sheet	
16	5	Fine Tip Black Permanent Markers	Precision markers with fine tip	Piece	

- b2b_db(item).csv (20x5)

ItemID,ProductID,UnitQuantity,PPU,AvailableStock

1,14,200,0.15,23
 2,9,3000,0.03,44
 3,11,150,0.25,34
 4,6,1500,0.07,52
 5,15,4000,0.01,42
 6,4,250,0.12,32
 7,6,3000,0.05,39
 8,8,250,0.1,40
 9,2,50,2,30
 10,1,200,0.15,29
 11,7,100,0.25,50
 12,13,50,2,37
 13,15,2000,0.015,29
 14,10,200,0.15,47
 15,2,80,1.67,44
 16,5,200,0.1,41
 17,4,150,0.1,38
 18,16,150,0.2,35
 19,3,100,0.2,27
 20,5,300,0.08,19

ItemID	ProductID	UnitQuantity	PPU	AvailableStock
1	14	200	0.15	23
2	9	3000	0.03	44
3	11	150	0.25	34
4	6	1500	0.07	52
5	15	4000	0.01	42
6	4	250	0.12	32
7	6	3000	0.05	39
8	8	250	0.1	40
9	2	50	2	30
10	1	200	0.15	29
11	7	100	0.25	50
12	13	50	2	37
13	15	2000	0.015	29
14	10	200	0.15	47
15	2	80	1.67	44
16	5	200	0.1	41
17	4	150	0.1	38
18	16	150	0.2	35
19	3	100	0.2	27
20	5	300	0.08	19

- b2b_db(order).csv (5x7)

OrderID, CustomerID, FulfilledBy, DeliveryAddress, OrderedOn, DeliveryEstimate, OrderStatus

1,3,5,6324 Felis. Avenue Los Angeles CA 95321,2024-08-06 13:25:00,2024-08-26 13:25:00,Delivered

2,6,8,428-4194 Mauris Avenue Flekkefjord TX 79482,2024-09-13 15:00:00,2024-10-03 15:00:00,Delivered

3,2,3,557-3038 Luctus Ave Santander PA 33459,2024-10-26 11:35:00,2024-11-10 11:35:00,Transit

4,1,10,1234 November St. Richardson TX 75080,2024-10-29 16:10:00,2024-11-15 16:10:00,Transit

5,7,9,764-6689 Nunc Street Iriga TN 45874,2024-11-02 11:35:00,2024-11-21 11:35:00,Pending

OrderID	CustomerID	FulfilledBy	DeliveryAddress	OrderedOn	DeliveryEstimate	OrderStatus
1	3	5	6324 Felis. Ave	2024-08-06 13:25:00	2024-08-26 13:25:00	Delivered
2	6	8	428-4194 Maur	2024-09-13 15:00:00	2024-10-03 15:00:00	Delivered
3	2	3	557-3038 Luct	2024-10-26 11:35:00	2024-11-10 11:35:00	Transit
4	1	10	1234 November	2024-10-29 16:10:00	2024-11-15 16:10:00	Transit
5	7	9	764-6689 Nunc	2024-11-02 11:35:00	2024-11-21 11:35:00	Pending

- b2b_db(invoice).csv (5x2)

InvoiceID, OrderID

1,1

2,2

3,3

4,4

5,5

InvoiceID	OrderID
1	1
2	2
3	3
4	4
5	5

- b2b_db(itemized_receipt).csv (10x3)

InvoiceID,ItemID,ItemQuantity

1,1,6

1,3,5

2,6,6

2,9,3

2,17,1

3,20,4

4,5,3

4,18,1

5,7,3

5,3,2

InvoiceID	ItemID	ItemQuantity
1	1	6
1	3	5
2	6	6
2	9	3
2	17	1
3	20	4
4	5	3
4	18	1
5	7	3
5	3	2