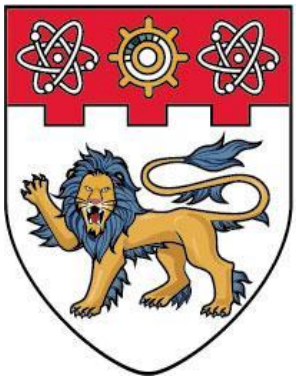

NANYANG TECHNOLOGICAL UNIVERSITY
SINGAPORE

SC2207 Lab 5

Tutorial Group A34, Group 3

Group members:

Hendy (U2122559J)

Cai Kaihang (U2121031J)

Lim Jin Feng, Alexus (U2121689H)

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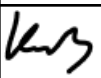
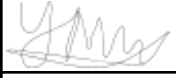
INDIVIDUAL CONTRIBUTION FORM

Full Name	Individual Contribution to Lab 5 Submission	Percentage of Contribution	Signature
Hendy	Worked on the table creation, data insertion and contributed to the formulation of several queries.	20%	
Lim Jin Feng, Alexus	Worked on the table creation, data insertion and contributed to the formulation of several queries.	20%	
Cai Kaihang	Worked on the table creation, data insertion and contributed to the formulation of several queries.	20%	
Yeoh Ming Wei	Worked on the table creation, data insertion and contributed to the formulation of several queries.	20%	
Sim Wei Feng	Worked on the table creation, data insertion and contributed to the formulation of several queries.	20%	

DDL Script for Table creation:

Delete/Drop Tables:

```
IF OBJECT_ID('dbo.BookstoreComplaint', 'U') IS NOT NULL DROP TABLE
dbo.BookstoreComplaint

IF OBJECT_ID('dbo.OrderComplaint', 'U') IS NOT NULL DROP TABLE
dbo.OrderComplaint

IF OBJECT_ID('dbo.[PriceRecords]', 'U') IS NOT NULL DROP TABLE
dbo.[PriceRecords]

IF OBJECT_ID('dbo.ItemsInOrder', 'U') IS NOT NULL DROP TABLE dbo.ItemsInOrder

IF OBJECT_ID('dbo.ComplaintHistory', 'U') IS NOT NULL DROP TABLE
dbo.ComplaintHistory

IF OBJECT_ID('dbo.Magazine', 'U') IS NOT NULL DROP TABLE dbo.Magazine

IF OBJECT_ID('dbo.Book', 'U') IS NOT NULL DROP TABLE dbo.Book

IF OBJECT_ID('dbo.Orders', 'U') IS NOT NULL DROP TABLE dbo.[Orders]

IF OBJECT_ID('dbo.Inventory', 'U') IS NOT NULL DROP TABLE dbo.Inventory

IF OBJECT_ID('dbo.Complaints', 'U') IS NOT NULL DROP TABLE dbo.Complaints

IF OBJECT_ID('dbo.Bookstore', 'U') IS NOT NULL DROP TABLE dbo.Bookstore

IF OBJECT_ID('dbo.Customer', 'U') IS NOT NULL DROP TABLE dbo.Customer

IF OBJECT_ID('dbo.Employee', 'U') IS NOT NULL DROP TABLE dbo.Employee

IF OBJECT_ID('dbo.Publication', 'U') IS NOT NULL DROP TABLE dbo.Publication
```

Creation of Tables and Foreign Key constraints:

```
CREATE TABLE Bookstore (

    [company-ID] varchar(255) NOT NULL


    PRIMARY KEY([company-ID])

);

CREATE TABLE Customer (

    [customerID] varchar(255) NOT NULL,

    [name] varchar(255)


    PRIMARY KEY([customerID])

);

CREATE TABLE Orders (

    [order-ID] varchar(255) NOT NULL,

    [shipping-addr] varchar(255),

    [shipping-cost] float,

    [timestamp] datetime,

    [customer-ID] varchar(255)


    PRIMARY KEY([order-ID]),

    FOREIGN KEY([customer-ID]) REFERENCES Customer([customerID]) ON DELETE
CASCADE

);

CREATE TABLE Employee (

    [employee-ID] varchar(255) NOT NULL,

    [name] varchar(255),

    [monthly-salary] float


    PRIMARY KEY([employee-ID])
```

```
);

CREATE TABLE Publication (

    [publication-ID] varchar(255) NOT NULL,

    publisher varchar(255),

    [year of publication] int


    PRIMARY KEY([publication-ID])

);

CREATE TABLE Magazine (

    [publication-ID] varchar(255) NOT NULL,

    issue varchar(255),

    title varchar(255)


    FOREIGN KEY([publication-ID]) REFERENCES Publication([publication-ID]) ON
DELETE CASCADE

);

CREATE TABLE Book (

    [publication-ID] varchar(255) NOT NULL,

    title varchar(255),


    FOREIGN KEY([publication-ID]) REFERENCES Publication([publication-ID]) ON
DELETE CASCADE

);

CREATE TABLE Complaints (

    [complaint-ID] varchar(255) NOT NULL,

    [employee-ID] varchar(255),

    [customer-ID] varchar(255),

    [message] varchar(255),

    [status] varchar(255)
```

```
    PRIMARY KEY([complaint-ID])

    FOREIGN KEY([employee-ID]) REFERENCES Employee([employee-ID]) ON DELETE
CASCADE,

    FOREIGN KEY([customer-ID]) REFERENCES Customer([customerID]) ON DELETE
CASCADE

);

CREATE TABLE BookstoreComplaint (

    [complaint-ID] varchar(255) NOT NULL,

    [company-ID] varchar(255)



    FOREIGN KEY([complaint-ID]) REFERENCES Complaints([complaint-ID]) ON DELETE
CASCADE,

    FOREIGN KEY([company-ID]) REFERENCES Bookstore([company-ID]) ON DELETE
CASCADE

);

CREATE TABLE OrderComplaint (

    [complaint-ID] varchar(255) NOT NULL,

    [order-ID] varchar(255)



    FOREIGN KEY([complaint-ID]) REFERENCES Complaints([complaint-ID]),

    FOREIGN KEY([order-ID]) REFERENCES Orders([order-ID])

);

CREATE TABLE ComplaintHistory (

    [complaint-ID] varchar(255) NOT NULL,

    [status] varchar(255) NOT NULL,

    [date] datetime NOT NULL,



    PRIMARY KEY([complaint-ID], status),

    FOREIGN KEY([complaint-ID]) REFERENCES Complaints([complaint-ID]) ON DELETE
CASCADE

);
```

```
CREATE TABLE Inventory (

    [inventory-ID] varchar(255) NOT NULL,

    [selling-price] float,

    [qty-in-stock] int,

    [publication-ID] varchar(255),

    [company-ID] varchar(255)



    PRIMARY KEY([inventory-ID]),

    FOREIGN KEY([publication-ID]) REFERENCES Publication([publication-ID]) ON
DELETE CASCADE,

    FOREIGN KEY([company-ID]) REFERENCES Bookstore([company-ID]) ON DELETE
CASCADE

);



CREATE TABLE PriceRecords (

    [time-updated] datetime NOT NULL,

    [inventory-ID] varchar(255) NOT NULL,

    price float



    PRIMARY KEY([time-updated], [inventory-ID]),

    FOREIGN KEY([inventory-ID]) REFERENCES Inventory([inventory-ID]) ON DELETE
CASCADE

);
```

```
CREATE TABLE ItemsInOrder (

    [item-ID] varchar(255) NOT NULL,

    [order-ID] varchar(255) NOT NULL,

    [inventory-ID] varchar(255) NOT NULL,

    [total-price] float,

    [item-qty] int,

    [status] varchar(255),

    [delivery-date] datetime,

    rating float,

    comment varchar(255),

    [date-time] datetime


    PRIMARY KEY([item-ID]),

    FOREIGN KEY([order-ID]) REFERENCES Orders([order-ID]) ON DELETE CASCADE,

    FOREIGN KEY([inventory-ID]) REFERENCES Inventory([inventory-ID]) ON DELETE
CASCADE

);
```

Data insertion

---- Population of Bookstore

```
DECLARE @id INT

SET @id = 1

WHILE @id < 21

BEGIN

    INSERT INTO BookStore ("company-ID")

    VALUES(@id)

    SET @id = @id + 1

END;
```

--- Population of Publication

```
INSERT INTO  Publication ([publication-ID],publisher,[year of publication])
VALUES (1, 'Nanyang Publisher Company' , 1998);

INSERT INTO  Publication ([publication-ID],publisher,[year of publication])
VALUES (3, 'Nanyang Publisher Company' , 2003);

INSERT INTO  Publication ([publication-ID],publisher,[year of publication])
VALUES (4, 'Nanyang Publisher Company' , 2000);

INSERT INTO  Publication ([publication-ID],publisher,[year of publication])
VALUES (5, 'Nanyang Publisher Company' , 2007);

INSERT INTO  Publication ([publication-ID],publisher,[year of publication])
VALUES (7, 'Nanyang Publisher Company' , 1998);

INSERT INTO  Publication ([publication-ID],publisher,[year of publication])
VALUES (14, 'Nanyang Publisher Company' , 2013);

INSERT INTO  Publication ([publication-ID],publisher,[year of publication])
VALUES (2, 'Temasek Publisher Company' , 2001);

INSERT INTO  Publication ([publication-ID],publisher,[year of publication])
VALUES (6, 'Temasek Publisher Company' , 2002);

INSERT INTO  Publication ([publication-ID],publisher,[year of publication])
VALUES (9, 'Temasek Publisher Company' , 2003);

INSERT INTO  Publication ([publication-ID],publisher,[year of publication])
VALUES (11, 'Temasek Publisher Company' , 2004);

INSERT INTO  Publication ([publication-ID],publisher,[year of publication])
VALUES (8, 'Penguin Publishers' , 1990);
```

```
INSERT INTO  Publication ([publication-ID],publisher,[year of publication])
VALUES (15, 'Penguin Publishers' , 1990);

INSERT INTO  Publication ([publication-ID],publisher,[year of publication])
VALUES (10, 'Penguin Publishers' , 2000);

INSERT INTO  Publication ([publication-ID],publisher,[year of publication])
VALUES (12, 'Penguin Publishers' , 2010);

INSERT INTO  Publication ([publication-ID],publisher,[year of publication])
VALUES (13, 'Penguin Publishers' , 2012);
```

--- Population of Book

```
INSERT INTO Book ([publication-ID],title) VALUES (1, 'Harry Porter: The Boy
that Lifts');

INSERT INTO Book ([publication-ID],title) VALUES (14, 'Harry Porter Finale');

INSERT INTO Book ([publication-ID],title) VALUES (4, 'Harry Porter: One in the
Chamber');

INSERT INTO Book ([publication-ID],title) VALUES (5, 'Bridge to Terabithia');

INSERT INTO Book ([publication-ID],title) VALUES (3, 'The Nightingale');

INSERT INTO Book ([publication-ID],title) VALUES (7, 'The Catcher in the Rye');

INSERT INTO Book ([publication-ID],title) VALUES (8, 'Oxford Dictionary');

INSERT INTO Book ([publication-ID],title) VALUES (10, 'Art of War');

INSERT INTO Book ([publication-ID],title) VALUES (15, 'Stanford Dictionary');
```

--- Population of Magazine

```
INSERT INTO Magazine ([publication-ID],issue, title) VALUES (2, 'Vol. 1 , No.
1', 'Global Sciences: Chemistry');

INSERT INTO Magazine ([publication-ID],issue, title) VALUES (6, 'Vol. 1 , No.
2', 'Global Sciences: Physics');

INSERT INTO Magazine ([publication-ID],issue, title) VALUES (9, 'Vol. 1 , No.
3', 'Global Sciences: Biology');

INSERT INTO Magazine ([publication-ID],issue, title) VALUES (11, 'Vol. 2 , No.
1', 'Global Sciences: Astronomy');

INSERT INTO Magazine ([publication-ID],issue, title) VALUES (12, 'No. 1',
'Lifestyle');

INSERT INTO Magazine ([publication-ID],issue, title) VALUES (13, 'No. 2',
'Lifestyle');
```

-- Population of Employee table

```
INSERT INTO Employee([employee-ID],[name],[monthly-salary])
VALUES(101,'John',2000);

INSERT INTO Employee([employee-ID],[name],[monthly-salary])
VALUES(102,'Tom',1650);

INSERT INTO Employee([employee-ID],[name],[monthly-salary])
VALUES(103,'Ben',1500);

INSERT INTO Employee([employee-ID],[name],[monthly-salary])
VALUES(104,'Sam',1500);

INSERT INTO Employee([employee-ID],[name],[monthly-salary])
VALUES(105,'Mike',1800);
```

-- Population of Customer table

```
INSERT INTO Customer([customerID],[name]) VALUES(1001,'Alan');

INSERT INTO Customer([customerID],[name]) VALUES(1002,'Beck');

INSERT INTO Customer([customerID],[name]) VALUES(1003,'Charlie');

INSERT INTO Customer([customerID],[name]) VALUES(1004,'Don');

INSERT INTO Customer([customerID],[name]) VALUES(1005,'Eliza');

INSERT INTO Customer([customerID],[name]) VALUES(1006,'Fred');

INSERT INTO Customer([customerID],[name]) VALUES(1007,'Greg');

INSERT INTO Customer([customerID],[name]) VALUES(1008,'Hector');

INSERT INTO Customer([customerID],[name]) VALUES(1009,'Ivan');
```

--- Population of Orders

```
INSERT INTO Orders ("order-ID", "shipping-addr", "shipping-cost", "timestamp",
"customer-ID") VALUES ('1', '8, Nanyang Drive, 637719', 3.0, '7/23/2022
20:34:10', '1005');

INSERT INTO Orders ("order-ID", "shipping-addr", "shipping-cost", "timestamp",
"customer-ID") VALUES ('2', '8 Bukit Batok Street 41, Singapore 657993', 4,
'7/31/2022 12:34:10', '1001');

INSERT INTO Orders ("order-ID", "shipping-addr", "shipping-cost", "timestamp",
"customer-ID") VALUES ('3', '645 Jurong West Street 61, Singapore 640645', 3.5,
'8/4/2022 3:31:12', '1003');

INSERT INTO Orders ("order-ID", "shipping-addr", "shipping-cost", "timestamp",
"customer-ID") VALUES ('4', '285B Toh Guan Rd, Singapore 602285', 4, '8/1/2022
11:32:12', '1002');

INSERT INTO Orders ("order-ID", "shipping-addr", "shipping-cost", "timestamp",
"customer-ID") VALUES ('5', '645 Jurong West Street 61, Singapore 640645', 3.5,
'8/3/2022 9:23:58', '1003');

INSERT INTO Orders ("order-ID", "shipping-addr", "shipping-cost", "timestamp",
"customer-ID") VALUES ('6', '8, Nanyang Drive, 637719', 3, '8/2/2022 11:32:12',
'1005');

INSERT INTO Orders ("order-ID", "shipping-addr", "shipping-cost", "timestamp",
"customer-ID") VALUES ('7', '42 Eng Neo Ave, Singapore 289533', 4, '7/27/2022
11:32:12', '1004');

INSERT INTO Orders ("order-ID", "shipping-addr", "shipping-cost", "timestamp",
"customer-ID") VALUES ('8', '125 Whitley Rd, Singapore 297820', 4.50,
'8/10/2022 11:32:12', '1009');
```

```
INSERT INTO Orders ("order-ID", "shipping-addr", "shipping-cost", "timestamp",
"customer-ID") VALUES ('9', '8 Bukit Batok Street 41, Singapore 657993', 4,
'8/11/2022 13:32:23', '1001');

INSERT INTO Orders ("order-ID", "shipping-addr", "shipping-cost", "timestamp",
"customer-ID") VALUES ('10', '19 Pepys Rd, Singapore 118450', 3.5, '2022-08-20
15:38:12', '1006');

INSERT INTO Orders ("order-ID", "shipping-addr", "shipping-cost", "timestamp",
"customer-ID") VALUES ('11', '8 Bukit Batok Street 41, Singapore 657993', 4,
'8/24/2022 23:15:29', '1001');

INSERT INTO Orders ("order-ID", "shipping-addr", "shipping-cost", "timestamp",
"customer-ID") VALUES ('12', '645 Jurong West Street 61, Singapore 640645',
3.5, '8/27/2022 19:29:12', '1003');

INSERT INTO Orders ("order-ID", "shipping-addr", "shipping-cost", "timestamp",
"customer-ID") VALUES ('13', '95 Jln Kampong Chantek, Singapore 588648', 4,
'8/25/2022 0:29:32', '1008');

INSERT INTO Orders ("order-ID", "shipping-addr", "shipping-cost", "timestamp",
"customer-ID") VALUES ('14', '8, Nanyang Drive, 637719', 3, '8/15/2022
20:38:23', '1005');

INSERT INTO Orders ("order-ID", "shipping-addr", "shipping-cost", "timestamp",
"customer-ID") VALUES ('15', '8 Bukit Batok Street 41, Singapore 657993', 4,
'2022-08-20 10:32:12', '1001');

INSERT INTO Orders ("order-ID", "shipping-addr", "shipping-cost", "timestamp",
"customer-ID") VALUES ('16', '367 Woodlands Ave 5, Singapore 730367', 4,
'8/12/2022 0:29:23', '1007');

INSERT INTO Orders ("order-ID", "shipping-addr", "shipping-cost", "timestamp",
"customer-ID") VALUES ('17', '285B Toh Guan Rd, Singapore 602285', 4,
'7/13/2022 17:12:39', '1002');

INSERT INTO Orders ("order-ID", "shipping-addr", "shipping-cost", "timestamp",
"customer-ID") VALUES ('18', '8 Bukit Batok Street 41, Singapore 657993', 4.00,
'7/1/2022 16:32:10', '1001');

INSERT INTO Orders ("order-ID", "shipping-addr", "shipping-cost", "timestamp",
"customer-ID") VALUES ('19', '19 Pepys Rd, Singapore 118450', 3.5, '7/9/2022
19:58:23', '1006');

INSERT INTO Orders ("order-ID", "shipping-addr", "shipping-cost", "timestamp",
"customer-ID") VALUES ('20', '285B Toh Guan Rd, Singapore 602285', 4.00,
'7/18/2022 16:45:32', '1002');

INSERT INTO Orders ("order-ID", "shipping-addr", "shipping-cost", "timestamp",
"customer-ID") VALUES ('21', '19 Pepys Rd, Singapore 118450', 3.50, '2022-07-10
17:58:32', '1006');

INSERT INTO Orders ("order-ID", "shipping-addr", "shipping-cost", "timestamp",
"customer-ID") VALUES ('22', '285B Toh Guan Rd, Singapore 602285', 4,
'2022-07-20 23:25:49', '1002');

INSERT INTO Orders ("order-ID", "shipping-addr", "shipping-cost", "timestamp",
```

```
"customer-ID") VALUES ('23', '8 Bukit Batok Street 41, Singapore 657993', 4,
'2022-06-2 02:58:32', '1001');

INSERT INTO Orders ("order-ID", "shipping-addr", "shipping-cost", "timestamp",
"customer-ID") VALUES ('24', '645 Jurong West Street 61, Singapore 640645',
3.50, '2022-06-07 12:48:59', '1003');

INSERT INTO Orders ("order-ID", "shipping-addr", "shipping-cost", "timestamp",
"customer-ID") VALUES ('25', '8 Bukit Batok Street 41, Singapore 657993', 4,
'2022-06-10 11:59:32', '1001');

INSERT INTO Orders ("order-ID", "shipping-addr", "shipping-cost", "timestamp",
"customer-ID") VALUES ('26', '8, Nanyang Drive, 637719', 3, '2022-06-21
14:23:39', '1005');

INSERT INTO Orders ("order-ID", "shipping-addr", "shipping-cost", "timestamp",
"customer-ID") VALUES ('27', '285B Toh Guan Rd, Singapore 602285', 4,
'2022-06-13 16:29:30', '1002');

INSERT INTO Orders ("order-ID", "shipping-addr", "shipping-cost", "timestamp",
"customer-ID") VALUES ('28', '42 Eng Neo Ave, Singapore 289533', 4, '2022-08-10
18:23:49', '1004');

INSERT INTO Orders ("order-ID", "shipping-addr", "shipping-cost", "timestamp",
"customer-ID") VALUES ('29', '95 Jln Kampong Chantek, Singapore 588648', 4,
'2022-08-12 17:23:49', '1008');

INSERT INTO Orders ("order-ID", "shipping-addr", "shipping-cost", "timestamp",
"customer-ID") VALUES ('30', '645 Jurong West Street 61, Singapore 640645',
3.5, '2022-08-22 20:59:49', '1003');

INSERT INTO Orders ("order-ID", "shipping-addr", "shipping-cost", "timestamp",
"customer-ID") VALUES ('31', '645 Jurong West Street 61, Singapore 640645',
3.5, '2022-08-11 23:59:49', '1003');

INSERT INTO Orders ("order-ID", "shipping-addr", "shipping-cost", "timestamp",
"customer-ID") VALUES ('32', '8, Nanyang Drive, 637719', 3, '2022-06-01
08:29:59', '1005');

INSERT INTO Orders ("order-ID", "shipping-addr", "shipping-cost", "timestamp",
"customer-ID") VALUES ('33', '19 Pepys Rd, Singapore 118450', 3.5, '2022-09-15
22:19:59', '1006');

INSERT INTO Orders ("order-ID", "shipping-addr", "shipping-cost", "timestamp",
"customer-ID") VALUES ('34', '8, Nanyang Drive, 637719', 3, '2022-09-17
16:23:22', '1005');

INSERT INTO Orders ("order-ID", "shipping-addr", "shipping-cost", "timestamp",
"customer-ID") VALUES ('35', '367 Woodlands Ave 5, Singapore 730367', 4,
'2022-09-08 20:25:23', '1007');

INSERT INTO Orders ("order-ID", "shipping-addr", "shipping-cost", "timestamp",
"customer-ID") VALUES ('36', '125 Whitley Rd, Singapore 297820', 4.5,
'2022-05-13 23:58:23', '1009');
```

-- Population of Complaints table

```
INSERT INTO
Complaints([complaint-ID],[employee-ID],[customer-ID],message,status) VALUES(1,
101, 1001, 'I received a damaged book', 'Pending');

INSERT INTO
Complaints([complaint-ID],[employee-ID],[customer-ID],message,status) VALUES(2,
102, 1002, 'I received the wrong book', 'Addressed');

INSERT INTO
Complaints([complaint-ID],[employee-ID],[customer-ID],message,status) VALUES(3,
103, 1003, 'I did not receive my order at all', 'Pending');

INSERT INTO
Complaints([complaint-ID],[employee-ID],[customer-ID],message,status) VALUES(4,
101, 1004, 'I have a problem with my payment process', 'Pending');

INSERT INTO
Complaints([complaint-ID],[employee-ID],[customer-ID],message,status) VALUES(5,
102, 1005, 'I am not able to place orders', 'Addressed');

INSERT INTO
Complaints([complaint-ID],[employee-ID],[customer-ID],message,status) VALUES(6,
104, 1009, 'I ordered a book weeks ago and its still not here', 'Pending');

INSERT INTO
Complaints([complaint-ID],[employee-ID],[customer-ID],message,status) VALUES(7,
103, 1001, 'The book received had missing pages', 'Pending');

INSERT INTO
Complaints([complaint-ID],[employee-ID],[customer-ID],message,status) VALUES(8,
105, 1006, 'I ordered hard cover but received a paperback', 'Addressed');

INSERT INTO
Complaints([complaint-ID],[employee-ID],[customer-ID],message,status) VALUES(9,
101, 1005, 'My order was cancelled without explanation', 'Pending');

INSERT INTO
Complaints([complaint-ID],[employee-ID],[customer-ID],message,status)
VALUES(10, 102, 1003, 'I never got the book I ordered weeks ago', 'Addressed');

INSERT INTO
Complaints([complaint-ID],[employee-ID],[customer-ID],message,status)
VALUES(11, 103, 1002, 'The contents of the book did not match the description
given', 'Addressed');

INSERT INTO
Complaints([complaint-ID],[employee-ID],[customer-ID],message,status)
VALUES(12, 104, 1007, 'The website advertised the book as available but it is
actually out of stock', 'Pending');

INSERT INTO
Complaints([complaint-ID],[employee-ID],[customer-ID],message,status)
VALUES(13, 105, 1001, 'I got charged more than what was advertised in my
order', 'Addressed');
```

```
INSERT INTO
Complaints([complaint-ID],[employee-ID],[customer-ID],message,status)
VALUES(14, 101, 1001, 'Misleading description given for book', 'Addressed');

INSERT INTO
Complaints([complaint-ID],[employee-ID],[customer-ID],message,status)
VALUES(15, 102, 1008, 'Book has the wrong description information displayed',
'Addressed');

INSERT INTO
Complaints([complaint-ID],[employee-ID],[customer-ID],message,status)
VALUES(16, 104, 1003, 'Lack of variety in book choices', 'Addressed');

INSERT INTO
Complaints([complaint-ID],[employee-ID],[customer-ID],message,status)
VALUES(17, 105, 1001, 'High price, but low quality books', 'Pending');

INSERT INTO
Complaints([complaint-ID],[employee-ID],[customer-ID],message,status)
VALUES(18, 103, 1002, 'Lack of refund option', 'Pending');

INSERT INTO
Complaints([complaint-ID],[employee-ID],[customer-ID],message,status)
VALUES(19, 101, 1005, 'Confusing UI, accidently bought 2 copies of the same
book without realising', 'Addressed');

INSERT INTO
Complaints([complaint-ID],[employee-ID],[customer-ID],message,status)
VALUES(20, 102, 1006, 'Limited book choice', 'Pending');
```

-- Population of OrderComplaint table

```
TRUNCATE TABLE OrderComplaint;

INSERT INTO OrderComplaint([complaint-ID],[order-ID]) VALUES(1,2);

INSERT INTO OrderComplaint([complaint-ID],[order-ID]) VALUES(2,4);

INSERT INTO OrderComplaint([complaint-ID],[order-ID]) VALUES(3,5);

INSERT INTO OrderComplaint([complaint-ID],[order-ID]) VALUES(4,7);

INSERT INTO OrderComplaint([complaint-ID],[order-ID]) VALUES(5,1);

INSERT INTO OrderComplaint([complaint-ID],[order-ID]) VALUES(6,8);

INSERT INTO OrderComplaint([complaint-ID],[order-ID]) VALUES(7,9);

INSERT INTO OrderComplaint([complaint-ID],[order-ID]) VALUES(8,10);

INSERT INTO OrderComplaint([complaint-ID],[order-ID]) VALUES(9,6);

INSERT INTO OrderComplaint([complaint-ID],[order-ID]) VALUES(10,3);

INSERT INTO OrderComplaint([complaint-ID],[order-ID]) VALUES(17, 11);
```

```
INSERT INTO OrderComplaint([complaint-ID],[order-ID]) VALUES(16, 12);

INSERT INTO OrderComplaint([complaint-ID],[order-ID]) VALUES(15, 13);

INSERT INTO OrderComplaint([complaint-ID],[order-ID]) VALUES(19, 14);

INSERT INTO OrderComplaint([complaint-ID],[order-ID]) VALUES(12, 16);

INSERT INTO OrderComplaint([complaint-ID],[order-ID]) VALUES(11, 17);

INSERT INTO OrderComplaint([complaint-ID],[order-ID]) VALUES(13, 18);

INSERT INTO OrderComplaint([complaint-ID],[order-ID]) VALUES(20, 19);

INSERT INTO OrderComplaint([complaint-ID],[order-ID]) VALUES(18, 20);
```

-- Population of BookstoreComplaint table

```
TRUNCATE TABLE BookstoreComplaint;

INSERT INTO BookstoreComplaint([complaint-ID],[company-ID]) VALUES(11,2);

INSERT INTO BookstoreComplaint([complaint-ID],[company-ID]) VALUES(12,3);

INSERT INTO BookstoreComplaint([complaint-ID],[company-ID]) VALUES(13,4);

INSERT INTO BookstoreComplaint([complaint-ID],[company-ID]) VALUES(14,2);

INSERT INTO BookstoreComplaint([complaint-ID],[company-ID]) VALUES(15,11);

INSERT INTO BookstoreComplaint([complaint-ID],[company-ID]) VALUES(16,12);

INSERT INTO BookstoreComplaint([complaint-ID],[company-ID]) VALUES(17,5);

INSERT INTO BookstoreComplaint([complaint-ID],[company-ID]) VALUES(18,6);

INSERT INTO BookstoreComplaint([complaint-ID],[company-ID]) VALUES(19,7);

INSERT INTO BookstoreComplaint([complaint-ID],[company-ID]) VALUES(20,10);
```

-- Population of ComplaintHistory table

```
INSERT INTO ComplaintHistory([complaint-ID],status,date)
VALUES(1,'Pending','2022-08-01');
```

```
INSERT INTO ComplaintHistory([complaint-ID],status,date)
VALUES(10,'Pending','2022-08-05');

INSERT INTO ComplaintHistory([complaint-ID],status,date) VALUES(10,'Being
Handled','2022-08-06');

INSERT INTO ComplaintHistory([complaint-ID],status,date)
VALUES(10,'Addressed','2022-08-07');

INSERT INTO ComplaintHistory([complaint-ID],status,date)
VALUES(11,'Pending','2022-07-14');

INSERT INTO ComplaintHistory([complaint-ID],status,date) VALUES(11,'Being
Handled','2022-07-15');

INSERT INTO ComplaintHistory([complaint-ID],status,date)
VALUES(11,'Addressed','2022-07-17');

INSERT INTO ComplaintHistory([complaint-ID],status,date)
VALUES(12,'Pending','2022-08-13');

INSERT INTO ComplaintHistory([complaint-ID],status,date)
VALUES(13,'Pending','2022-07-02');

INSERT INTO ComplaintHistory([complaint-ID],status,date) VALUES(13,'Being
Handled','2022-07-03');

INSERT INTO ComplaintHistory([complaint-ID],status,date)
VALUES(13,'Addressed','2022-07-05');

INSERT INTO ComplaintHistory([complaint-ID],status,date)
VALUES(14,'Pending','2022-08-21');

INSERT INTO ComplaintHistory([complaint-ID],status,date) VALUES(14,'Being
Handled','2022-08-22');

INSERT INTO ComplaintHistory([complaint-ID],status,date)
VALUES(14,'Addressed','2022-08-26');

INSERT INTO ComplaintHistory([complaint-ID],status,date)
VALUES(15,'Pending','2022-08-26');

INSERT INTO ComplaintHistory([complaint-ID],status,date) VALUES(15,'Being
Handled','2022-08-27');

INSERT INTO ComplaintHistory([complaint-ID],status,date)
VALUES(15,'Addressed','2022-08-28');

INSERT INTO ComplaintHistory([complaint-ID],status,date)
VALUES(16,'Pending','2022-08-28');

INSERT INTO ComplaintHistory([complaint-ID],status,date) VALUES(16,'Being
Handled','2022-08-29');

INSERT INTO ComplaintHistory([complaint-ID],status,date)
VALUES(16,'Addressed','2022-09-01');
```

```
INSERT INTO ComplaintHistory([complaint-ID],status,date)
VALUES(17,'Pending','2022-08-25');

INSERT INTO ComplaintHistory([complaint-ID],status,date) VALUES(17,'Being
Handled','2022-08-26');

INSERT INTO ComplaintHistory([complaint-ID],status,date)
VALUES(18,'Pending','2022-07-19');

INSERT INTO ComplaintHistory([complaint-ID],status,date)
VALUES(19,'Pending','2022-08-16');

INSERT INTO ComplaintHistory([complaint-ID],status,date) VALUES(19,'Being
Handled','2022-08-17');

INSERT INTO ComplaintHistory([complaint-ID],status,date)
VALUES(19,'Addressed','2022-08-19');

INSERT INTO ComplaintHistory([complaint-ID],status,date)
VALUES(2,'Pending','2022-08-02');

INSERT INTO ComplaintHistory([complaint-ID],status,date) VALUES(2,'Being
Handled','2022-08-03');

INSERT INTO ComplaintHistory([complaint-ID],status,date)
VALUES(2,'Addressed','2022-08-07');

INSERT INTO ComplaintHistory([complaint-ID],status,date)
VALUES(20,'Pending','2022-07-10');

INSERT INTO ComplaintHistory([complaint-ID],status,date) VALUES(20,'Being
Handled','2022-07-11');

INSERT INTO ComplaintHistory([complaint-ID],status,date)
VALUES(3,'Pending','2022-08-04');

INSERT INTO ComplaintHistory([complaint-ID],status,date) VALUES(3,'Being
Handled','2022-08-05');

INSERT INTO ComplaintHistory([complaint-ID],status,date)
VALUES(4,'Pending','2022-07-28');

INSERT INTO ComplaintHistory([complaint-ID],status,date)
VALUES(5,'Pending','2022-07-24');

INSERT INTO ComplaintHistory([complaint-ID],status,date) VALUES(5,'Being
Handled','2022-07-25');

INSERT INTO ComplaintHistory([complaint-ID],status,date)
VALUES(5,'Addressed','2022-07-28');

INSERT INTO ComplaintHistory([complaint-ID],status,date)
VALUES(6,'Pending','2022-08-11');

INSERT INTO ComplaintHistory([complaint-ID],status,date)
VALUES(7,'Pending','2022-08-12');
```

```
INSERT INTO ComplaintHistory([complaint-ID],status,date) VALUES(7,'Being
Handled','2022-08-13');

INSERT INTO ComplaintHistory([complaint-ID],status,date)
VALUES(8,'Pending','2022-08-21');

INSERT INTO ComplaintHistory([complaint-ID],status,date) VALUES(8,'Being
Handled','2022-08-22');

INSERT INTO ComplaintHistory([complaint-ID],status,date)
VALUES(8,'Addressed','2022-08-23');

INSERT INTO ComplaintHistory([complaint-ID],status,date)
VALUES(9,'Pending','2022-08-03');
```

-- Population of Inventory

```
INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(1,13.5,23,14,1);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(10,14,6,1,1);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(11,15,7,1,19);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(12,12.7,1,1,9);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(13,13.2,2,1,20);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(14,8,17,8,2);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(15,7,18,8,13);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(16,8,20,8,14);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(2,23.5,2,14,2);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(3,13.5,10,14,3);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(4,13,11,14,4);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(5,14,30,14,7);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(6,19,26,14,8);
```

```
INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(7,20,3,4,1);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(8,22,14,4,18);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(9,21,16,4,17);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(17,15,30,3,16);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(18,14.5,50,3,15);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(19,14.7,20,3,5);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(20,12,35,5,6);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(21,11.1,55,5,10);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(22,13,24,5,12);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(23,18,47,7,11);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(24,17,53,7,3);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(25,16,93,7,7);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(26,14.98,75,10,15);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(27,16,45,10,14);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(28,13,15,10,11);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(29,7.9,69,12,4);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(30,7.5,36,13,5);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(31,15,50,9,12);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(32,8,57,12,9);
```

```
INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(33,7,97,13,10);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(34,14,39,9,13);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(35,7,35,12,8);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(36,6.5,40,13,6);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(37,13,30,11,19);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(38,12,38,11,17);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(39,13,45,11,18);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(40,14,48,2,16);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(41,14,30,2,20);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(42,14.5,30,2,15);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(43,13.5,20,6,4);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(44,13,25,6,14);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(45,14,37,6,7);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(46,14.5,40,9,2);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(47,21,27,15,7);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(48,20,25,15,10);

INSERT INTO Inventory([inventory-ID],[selling-price],[qty-in-stock],
[publication-ID], [company-ID]) VALUES(49,19,40,15,15);
```

-- Population of PriceRecords

```
INSERT INTO PriceRecords([time-updated], [inventory-ID], price)

VALUES ('2022-08-01 12:23:01', 1, 13.5);
```

```
INSERT INTO PriceRecords([time-updated], [inventory-ID], price)

VALUES ('2021-09-10 12:00:00', 2, 23.5);

INSERT INTO PriceRecords([time-updated], [inventory-ID], price)

VALUES ('2022-08-11 13:30:25', 3, 13.5);

INSERT INTO PriceRecords([time-updated], [inventory-ID], price)

VALUES ('2022-08-18 18:15:00', 4, 13.5);

INSERT INTO PriceRecords([time-updated], [inventory-ID], price)

VALUES ('2022-08-27 19:30:00', 5, 14);

INSERT INTO PriceRecords([time-updated], [inventory-ID], price)

VALUES ('2022-10-09 00:00:00', 6, 19);

INSERT INTO PriceRecords([time-updated], [inventory-ID], price) VALUES
('2021-03-31 12:00:00', 7, 20);

INSERT INTO PriceRecords([time-updated], [inventory-ID], price) VALUES
('2021-04-01 13:00:00', 8, 19.50);

INSERT INTO PriceRecords([time-updated], [inventory-ID], price) VALUES
('2021-03-30 12:15:00', 9, 19.50);

INSERT INTO PriceRecords([time-updated], [inventory-ID], price) VALUES
('2021-12-09 00:00:00', 10, 16);

INSERT INTO PriceRecords([time-updated], [inventory-ID], price) VALUES
('2021-11-09 16:00:21', 11, 16.50);

INSERT INTO PriceRecords([time-updated], [inventory-ID], price) VALUES
('2022-01-09 15:13:20', 12, 17);

INSERT INTO PriceRecords([time-updated], [inventory-ID], price) VALUES
('2022-01-10 11:31:14', 13, 17);

INSERT INTO PriceRecords([time-updated], [inventory-ID], price) VALUES
('2022-02-26 14:14:15', 14, 11);

INSERT INTO PriceRecords([time-updated], [inventory-ID], price) VALUES
('2022-11-23 13:11:11', 15, 12);

INSERT INTO PriceRecords([time-updated], [inventory-ID], price) VALUES
('2022-12-13 17:46:01', 16, 11.50);

INSERT INTO PriceRecords([time-updated], [inventory-ID], price) VALUES
('2022-01-09 12:44:13', 10, 16.50);
```

--Population of ItemsInOrders

```
INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], status, [delivery-date], rating, comment, [date-time])

VALUES (1, 17, 10, 28.00, 2, 'Delivered', '2022-07-16 19:33:23', 3, 'Packaging
not so good', '2022-07-16 19:33:23')

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], status, [delivery-date], rating, comment, [date-time])

VALUES (2, 1, 5, 28.00, 2, 'Delivered', '2022-08-01 12:58:00', 5, 'Nice
driver', '2022-08-01 12:58:00')

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], status, [delivery-date], rating, comment, [date-time])

VALUES (3, 5, 6, 38.00, 2, 'Delivered', '2022-08-11 13:58:22', 5, 'Fast
Delivery!', '2022-08-11 13:58:22')

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], status, [delivery-date], rating, comment, [date-time])

VALUES (4, 17, 12, 12.70, 1, 'Delivered', '2022-07-15 18:32:25', 4, 'Rude
driver but good item', '2022-07-15 18:32:25')

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], status, [delivery-date], rating, comment, [date-time])

VALUES (5, 1, 4, 26.00, 2, 'Delivered', '2022-08-04 10:13:54', 5, 'Nice book!',
'2022-08-04 10:13:54')

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], status, [delivery-date], rating, comment, [date-time])

VALUES (6, 3, 5, 42.00, 3, 'Delivered', '2022-08-10 18:43:22', 5, 'Bought for
my friends', '2022-08-19 18:43:22')



INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], status, [delivery-date], rating, comment, [date-time])

VALUES (7, 18, 12, 25.40, 2, 'Being Processed', NULL, NULL, NULL, NULL)

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(8, 8, 4, 26, 2, 'Delivered', '2022-08-16 19:15:32', 5, 'Gift for
friend!', '2022-08-16 19:15:32');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(9, 21, 13, 26.4, 2, 'Delivered', '2022-07-12 16:48:23', 3, 'Bad
packaging, slow delivery', '2022-07-12 16:48:23');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])
```

```
VALUES(10, 10, 5, 42, 3, 'Delivered', '2022-08-25 16:15:01', 5, 'Nice delivery
service!', '2022-08-25 16:15:01');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(11, 9, 17, 150, 10, 'Delivered', '2022-08-20 11:13:20', 5, 'Nice book!',
'2022-08-20 11:13:20');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(12, 21, 13, 13.2, 1, 'Being Processed', NULL, NULL, NULL, NULL);

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(13, 2, 18, 29, 2, 'Delivered', '2022-08-06 0:15:23', 5, 'Great book that
I read', '2022-08-06 0:15:23');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(14, 28, 38, 180, 15, 'Delivered', '2022-08-13 16:28:32', 4, 'Poor
packaging but nice driver, keeps apologizing', '2022-08-13 16:28:32');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(15, 1, 17, 30, 2, 'Delivered', '2022-08-02 18:22:30', 5, 'Nice book!',
'2022-08-02 18:22:30');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(16, 28, 37, 195, 15, 'Delivered', '2022-08-15 17:23:54', 5, NULL,
'2022-08-15 17:23:54');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(17, 3, 20, 240, 20, 'Delivered', '2022-08-08 11:23:59', 5, NULL,
'2022-08-08 11:23:59');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(18, 22, 10, 14, 1, 'Shipped', NULL, NULL, NULL, NULL);

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(19, 22, 12, 12.7, 1, 'Shipped', NULL, NULL, NULL, NULL);

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])
```

```
VALUES(20, 3, 20, 240, 20, 'Delivered', '2022-08-11 01:32:33', 5, 'Great
book!', '2022-08-11 01:32:33');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(21, 22, 6, 57, 3, 'Being Processed', NULL, NULL, NULL, NULL);

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(22, 9, 3, 27, 2, 'Delivered', '2022-08-20 08:33:23', 5, 'Nice driver!',
'2022-08-20 08:33:23');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(23, 4, 2, 70.5, 3, 'Delivered', '2022-08-07 01:23:20', 5, 'Fast
Delivery!', '2022-08-07 1:23:20');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(24, 18, 4, 26, 2, 'Delivered', '2022-07-07 14:23:22', 3, 'Poor
packaging!', '2022-07-07 14:23:22');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(25, 5, 17, 30, 2, 'Delivered', '2022-08-09 19:19:59', 5, 'Nice book!',
'2022-08-09 19:19:59');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(26, 11, 5, 28, 2, 'Delivered', '2022-08-29 10:32:13', 5, 'Thanks for the
book!', '2022-08-29 10:32:13');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(27, 11, 20, 24, 2, 'Delivered', '2022-08-30 01:48:40', 5, 'Great book,
will order again!', '2022-08-30 01:48:40');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(28, 8, 18, 43.5, 3, 'Delivered', '2022-08-18 15:49:50', 5, 'Nice book!',
'2022-08-18 15:49:50');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(29, 21, 4, 39, 3, 'Delivered', '2022-07-14 13:58:29', 2, 'poor packaging
and poor attitude of driver', '2022-07-14 13:58:29');
```

```
INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(30, 18, 6, 38, 2, 'Delivered', '2022-07-09 13:29:30', 3, 'Poor driver
attitude, slow delivery, wont buy again', '2022-07-09 13:29:30');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(31, 12, 17, 30, 2, 'Delivered', '2022-08-31 12:43:09', 5, 'Great
delivery', '2022-08-31 12:43:09');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(32, 10, 3, 40.5, 3, 'Delivered', '2022-08-22 19:59:02', 5, 'Nice
packaging', '2022-08-22 19:59:02');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(33, 20, 19, 29.4, 2, 'Delivered', '2022-07-23 16:58:40', 4, 'Not so
great book but bought for friends', '2022-07-23 16:58:40');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(34, 6, 20, 180, 15, 'Delivered', '2022-08-12 13:24:33', 5, 'Great
delivery', '2022-08-12 13:24:33');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(35, 19, 18, 29, 2, 'Delivered', '2022-07-16 13:49:30', 5, 'Nice driver',
'2022-07-16 13:49:30');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(36, 19, 17, 30, 2, 'Delivered', '2022-07-16 19:29:30', 5, 'Nice',
'2022-07-16 19:29:30');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(37, 19, 19, 29.4, 2, 'Delivered', '2022-07-15 16:48:23', 4, 'Poor
attitude of driver', '2022-07-15 16:48:23');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(38, 24, 10, 28, 2, 'Delivered', '2022-06-10 10:22:34', 3, 'Poor
packaging and bad book', '2022-06-10 10:22:34');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])
```

```
VALUES(39, 27, 1, 13.5, 1, 'Delivered', '2022-06-16 18:20:23', 5, 'Nice book!',
'2022-06-16 18:20:23');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(40, 26, 17, 75, 5, 'Delivered', '2022-06-23 19:20:32', 5, 'Will
recommend!', '2022-06-23 19:20:32');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(41, 25, 11, 15, 1, 'Delivered', '2022-06-14 13:23:45', 3, 'Poor
condition', '2022-06-14 13:23:45');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(42, 14, 10, 14, 1, 'Delivered', '2022-08-20 17:55:40', 5, 'Nice
packaging', '2022-08-20 17:55:40');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(43, 25, 3, 13.5, 1, 'Delivered', '2022-06-13 16:32:44', 4, 'Great
delivery', '2022-06-13 16:32:44');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(44, 6, 11, 30, 2, 'Delivered', '2022-08-10 14:50:22', 5, 'Nice book!',
'2022-08-10 14:50:22');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(45, 25, 5, 14, 1, 'Delivered', '2022-06-18 19:16:34', 4, 'Nice book, but
lacks interesting content', '2022-06-18 19:16:34');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(46, 24, 1, 13.5, 1, 'Delivered', '2022-06-12 13:59:23', 5, 'Nice book!',
'2022-06-12 13:59:23');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(47, 2, 11, 15, 1, 'Delivered', '2022-06-09 19:47:32', 4, 'Packaging abit
bad', '2022-06-09 19:47:32');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(48, 26, 18, 58, 4, 'Delivered', '2022-06-23 12:32:59', 5, 'Great book',
'2022-06-23 12:32:59');
```

```
INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(49, 10, 12, 25.4, 2, 'Delivered', '2022-08-25 07:04:20', 5, 'Nice
courier service!', '2022-08-25 07:04:20');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(50, 29, 26, 74.9, 5, 'Delivered', '2022-08-16 18:23:25', 4, 'Nice
packaging', '2022-08-16 18:23:25');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(51, 35, 7, 20, 1, 'Delivered', '2022-09-12 10:23:22', 5, 'Thanks ',
'2022-09-12 10:23:22');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(52, 15, 12, 25.4, 2, 'Delivered', '2022-08-23 16:49:50', 5, NULL,
'2022-08-23 16:49:50');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(53, 36, 14, 8, 1, 'Delivered', '2022-05-15 18:49:50', 4, NULL,
'2022-05-15 18:49:50');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(54, 32, 22, 13, 1, 'Delivered', '2022-06-03 18:49:23', 4, 'bad service',
'2022-06-03 18:49:23');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(55, 29, 27, 80, 5, 'Delivered', '2022-08-16 18:23:25', 5, 'Great book!',
'2022-08-16 18:23:25');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(56, 14, 12, 12.7, 1, 'Delivered', '2022-08-18 19:04:10', 5, 'Nice',
'2022-08-18 19:04:10');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(57, 34, 25, 16, 1, 'Being Processed', NULL, NULL, NULL, NULL);

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(58, 26, 10, 14, 1, 'Delivered', '2022-06-29 12:58:32', 4, 'Thanks ',
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'2022-06-29 12:58:32');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(59, 14, 11, 15, 1, 'Delivered', '2022-08-21 09:20:21', 5, 'Great
delivery', '2022-08-21 09:20:21');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(60, 36, 48, 20, 1, 'Delivered', '2022-05-16 10:23:48', 5, 'Nice book',
'2022-05-16 10:23:48');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(61, 30, 28, 65, 5, 'Delivered', '2022-08-27 19:20:25', 5, 'Great
packaging, buy again!', '2022-08-27 19:20:25');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(62, 30, 26, 74.9, 5, 'Delivered', '2022-08-26 18:21:25', 4, 'Great
book!', '2022-08-26 18:21:25');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(63, 16, 13, 26.4, 2, 'Delivered', '2022-08-14 11:54:32', 5, 'Great
book!', '2022-08-14 11:54:32');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(64, 31, 26, 74.9, 5, 'Delivered', '2022-08-15 12:58:32', 5, 'Recommended
by friend! Superb!', '2022-08-15 12:58:32');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(65, 32, 35, 7, 1, 'Delivered', '2022-06-04 19:30:23', 4, 'Nice magazine,
poor packaging!', '2022-06-04 19:30:23');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(66, 33, 33, 7, 1, 'Shipped', NULL, NULL, NULL, NULL);

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(67, 4, 10, 28, 2, 'Delivered', '2022-08-13 10:23:45', 5, 'Nice book',
'2022-08-13 10:23:45');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])
```

```
VALUES(68, 33, 41, 14, 1, 'Shipped', NULL, NULL, NULL, NULL);

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(69, 31, 28, 65, 5, 'Delivered', '2022-08-14 19:23:53', 3, 'Poor packing
on a such a great book', '2022-08-14 19:23:53');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(70, 13, 11, 30, 2, 'Delivered', '2022-08-27 14:25:47', 5, 'Great
delivery service.', '2022-08-27 14:25:47');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(71, 34, 44, 13, 1, 'Shipped', NULL, NULL, NULL, NULL);

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(72, 7, 11, 30, 2, 'Delivered', '2022-08-04 10:20:43', 5, 'Nice service!
Definitely will order again', '2022-08-04 10:20:43');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(73, 35, 46, 14.5, 1, 'Delivered', '2022-09-13 14:23:59', 4, 'poor
attitude of courier driver, nice magazine tho', '2022-09-13 14:23:59');

INSERT INTO ItemsInOrder([item-ID], [order-ID], [inventory-ID], [total-price],
[item-qty], [status], [delivery-date], [rating], [comment], [date-time])

VALUES(74, 12, 10, 14, 1, 'Delivered', '2022-08-29 11:23:50', 5, 'Received as
per shown on website', '2022-08-29 11:23:50');
```

Screenshot Of Tables

Book Table

	publication-ID	title
1	1	Harry Porter: The Boy that Lifts
2	14	Harry Porter Finale
3	4	Harry Porter: One in the Chamber
4	5	Bridge to Terabithia
5	3	The Nightingale
6	7	The Catcher in the Rye
7	8	Oxford Dictionary
8	10	Art of War
9	15	Stanford Dictionary

Magazine Table

	publication-ID	issue	title
1	2	Vol. 1 , No. 1	Global Sciences: Chemistry
2	6	Vol. 1 , No. 2	Global Sciences: Physics
3	9	Vol. 1 , No. 3	Global Sciences: Biology
4	11	Vol. 2 , No. 1	Global Sciences: Astronomy
5	12	No. 1	Lifestyle
6	13	No. 2	Lifestyle

Publication Table

	publication-ID	publisher	year of publication
1	1	Nanyang Publisher Company	1998
2	10	Penguin Publishers	2000
3	11	Temasek Publisher Company	2004
4	12	Penguin Publishers	2010
5	13	Penguin Publishers	2012
6	14	Nanyang Publisher Company	2013
7	15	Penguin Publishers	1990
8	2	Temasek Publisher Company	2001
9	3	Nanyang Publisher Company	2003
10	4	Nanyang Publisher Company	2000
11	5	Nanyang Publisher Company	2007
12	6	Temasek Publisher Company	2002
13	7	Nanyang Publisher Company	1998
14	8	Penguin Publishers	1990
15	9	Temasek Publisher Company	2003

Employee Table

	employee-ID	name	monthly-salary
1	101	John	2000
2	102	Tom	1650
3	103	Ben	1500
4	104	Sam	1500
5	105	Mike	1800

Customer Table

	customerID	name
1	1001	Alan
2	1002	Beck
3	1003	Charlie
4	1004	Don
5	1005	Eliza
6	1006	Fred
7	1007	Greg
8	1008	Hector
9	1009	Ivan

Bookstore Table

	company-ID
1	1
2	10
3	11
4	12
5	13
6	14
7	15
8	16
9	17
10	18
11	19
12	2
13	20
14	3
15	4
16	5
17	6
18	7
19	8
20	9

BookstoreComplaint Table

	complaint-ID	company-ID
1	11	2
2	12	3
3	13	4
4	14	2
5	15	11
6	16	12
7	17	5
8	18	6
9	19	7
10	20	10

OrderComplaint Table

	complaint-ID	order-ID
1	1	2
2	2	4
3	3	5
4	4	7
5	5	1
6	6	8
7	7	9
8	8	10
9	9	6
10	10	3
11	17	11
12	16	12
13	15	13
14	19	14
15	12	16
16	11	17
17	13	18
18	20	19
19	18	20

Complaints Table

	complaint-ID	employee-ID	customer-ID	message	status
1	1	101	1001	I received a damaged book	Pending
2	10	102	1003	I never got the book I ordered weeks ago	Addressed
3	11	103	1002	The contents of the book did not match the descr...	Addressed
4	12	104	1007	The website advertised the book as available but...	Pending
5	13	105	1001	I got charged more than what was advertised in ...	Addressed
6	14	101	1001	Misleading description given for book	Addressed
7	15	102	1008	Book has the wrong description information displa...	Addressed
8	16	104	1003	Lack of variety in book choices	Addressed
9	17	105	1001	High price, but low quality books	Pending
10	18	103	1002	Lack of refund option	Pending
11	19	101	1005	Confusing UI, accidently bought 2 copies of the s...	Addressed
12	2	102	1002	I received the wrong book	Addressed
13	20	102	1006	Limited book choice	Pending
14	3	103	1003	I did not receive my order at all	Pending
15	4	101	1004	I have a problem with my payment process	Pending
16	5	102	1005	I am not able to place orders	Addressed
17	6	104	1009	I ordered a book weeks ago and its still not here	Pending
18	7	103	1001	The book received had missing pages	Pending
19	8	105	1006	I ordered hard cover but received a paperback	Addressed
20	9	101	1005	My order was cancelled without explanation	Pending

ComplaintHistory Table

	complaint-ID	status	date
1	1	Pending	2022-08-01 00:00:00.000
2	10	Addressed	2022-08-07 00:00:00.000
3	10	Being Handled	2022-08-06 00:00:00.000
4	10	Pending	2022-08-05 00:00:00.000
5	11	Addressed	2022-07-17 00:00:00.000
6	11	Being Handled	2022-07-15 00:00:00.000
7	11	Pending	2022-07-14 00:00:00.000
8	12	Pending	2022-08-13 00:00:00.000
9	13	Addressed	2022-07-05 00:00:00.000
10	13	Being Handled	2022-07-03 00:00:00.000
11	13	Pending	2022-07-02 00:00:00.000
12	14	Addressed	2022-08-26 00:00:00.000
13	14	Being Handled	2022-08-22 00:00:00.000
14	14	Pending	2022-08-21 00:00:00.000
15	15	Addressed	2022-08-28 00:00:00.000
16	15	Being Handled	2022-08-27 00:00:00.000
17	15	Pending	2022-08-26 00:00:00.000
18	16	Addressed	2022-09-01 00:00:00.000
19	16	Being Handled	2022-08-29 00:00:00.000
20	16	Pending	2022-08-28 00:00:00.000
21	17	Being Handled	2022-08-26 00:00:00.000
22	17	Pending	2022-08-25 00:00:00.000
23	18	Pending	2022-07-19 00:00:00.000
24	19	Addressed	2022-08-19 00:00:00.000
25	19	Being Handled	2022-08-17 00:00:00.000
26	19	Pending	2022-08-16 00:00:00.000
27	2	Addressed	2022-08-07 00:00:00.000
28	2	Being Handled	2022-08-03 00:00:00.000
29	2	Pending	2022-08-02 00:00:00.000
30	20	Being Handled	2022-07-11 00:00:00.000
31	20	Pending	2022-07-10 00:00:00.000
32	3	Being Handled	2022-08-05 00:00:00.000
33	3	Pending	2022-08-04 00:00:00.000
34	4	Pending	2022-07-28 00:00:00.000
35	5	Addressed	2022-07-28 00:00:00.000
36	5	Being Handled	2022-07-25 00:00:00.000
37	5	Pending	2022-07-24 00:00:00.000
38	6	Pending	2022-08-11 00:00:00.000
39	7	Being Handled	2022-08-13 00:00:00.000
40	7	Pending	2022-08-12 00:00:00.000
41	8	Addressed	2022-08-23 00:00:00.000
42	8	Being Handled	2022-08-22 00:00:00.000
43	8	Pending	2022-08-21 00:00:00.000
44	9	Pending	2022-08-03 00:00:00.000

Inventory Table

	inventory-ID	selling-price	qty-in-stock	publication-ID	company-ID
1	1	13.5	23	14	1
2	10	14	6	1	1
3	11	15	7	1	19
4	12	12.7	1	1	9
5	13	13.2	2	1	20
6	14	8	17	8	2
7	15	7	18	8	13
8	16	8	20	8	14
9	17	15	30	3	16
10	18	14.5	50	3	15
11	19	14.7	20	3	5
12	2	23.5	2	14	2
13	20	12	35	5	6
14	21	11.1	55	5	10
15	22	13	24	5	12
16	23	18	47	7	11
17	24	17	53	7	3
18	25	16	93	7	7
19	26	14.98	75	10	15
20	27	16	45	10	14
21	28	13	15	10	11
22	29	7.9	69	12	4
23	3	13.5	10	14	3
24	30	7.5	36	13	5
25	31	15	50	9	12
26	32	8	57	12	9
27	33	7	97	13	10
28	34	14	39	9	13
29	35	7	35	12	8
30	36	6.5	40	13	6
31	37	13	30	11	19
32	38	12	38	11	17
33	39	13	45	11	18
34	4	13	11	14	4
35	40	14	48	2	16
36	41	14	30	2	20
37	42	14.5	30	2	15
38	43	13.5	20	6	4
39	44	13	25	6	14
40	45	14	37	6	7
41	46	14.5	40	9	2
42	47	21	27	15	7
43	48	20	25	15	10
44	49	19	40	15	15
45	5	14	30	14	7
46	6	19	26	14	8
47	7	20	3	4	1
48	8	22	14	4	18
49	9	21	16	4	17

ItemsInOrder Table

	item-ID	order-ID	inventory-ID	total-price	item-qty	status	delivery-date	rating	comment	date-time
1	1	17	10	28	2	Delivered	2022-07-16 19:33:23.000	3	Packaging not so good	2022-07-16 19:33:23.000
2	10	10	5	42	3	Delivered	2022-08-25 16:15:01.000	5	Nice delivery service!	2022-08-25 16:15:01.000
3	11	9	17	150	10	Delivered	2022-08-20 11:13:20.000	5	Nice book!	2022-08-20 11:13:20.000
4	12	21	13	13.2	1	Being Processed	NULL	NULL	NULL	NULL
5	13	2	18	29	2	Delivered	2022-08-06 00:15:23.000	5	Great book that I read	2022-08-06 00:15:23.000
6	14	28	38	180	15	Delivered	2022-08-13 16:28:32.000	4	Poor packaging but nice driver, keeps apologizing	2022-08-13 16:28:32.000
7	15	1	17	30	2	Delivered	2022-08-02 18:22:30.000	5	Nice book!	2022-08-02 18:22:30.000
8	16	28	37	195	15	Delivered	2022-08-15 17:23:54.000	5	NULL	2022-08-15 17:23:54.000
9	17	3	20	240	20	Delivered	2022-08-08 11:23:59.000	5	NULL	2022-08-08 11:23:59.000
10	18	22	10	14	1	Shipped	NULL	NULL	NULL	NULL
11	19	22	12	12.7	1	Shipped	NULL	NULL	NULL	NULL
12	2	1	5	28	2	Delivered	2022-08-01 12:58:00.000	5	Nice driver	2022-08-01 12:58:00.000
13	20	3	20	240	20	Delivered	2022-08-11 01:32:33.000	5	Great book!	2022-08-11 01:32:33.000
14	21	22	6	57	3	Being Processed	NULL	NULL	NULL	NULL
15	22	9	3	27	2	Delivered	2022-08-20 08:33:23.000	5	Nice driver!	2022-08-20 08:33:23.000
16	23	4	2	70.5	3	Delivered	2022-08-07 01:23:20.000	5	Fast Delivery!	2022-08-07 01:23:20.000
17	24	18	4	26	2	Delivered	2022-07-07 14:23:22.000	3	Poor packaging!	2022-07-07 14:23:22.000
18	25	5	17	30	2	Delivered	2022-08-09 19:19:59.000	5	Nice book!	2022-08-09 19:19:59.000
19	26	11	5	28	2	Delivered	2022-08-29 10:32:13.000	5	Thanks for the book!	2022-08-29 10:32:13.000
20	27	11	20	24	2	Delivered	2022-08-30 01:48:40.000	5	Great book, will order again!	2022-08-30 01:48:40.000
21	28	8	18	43.5	3	Delivered	2022-08-18 15:49:50.000	5	Nice book!	2022-08-18 15:49:50.000
22	29	21	4	39	3	Delivered	2022-07-14 13:58:29.000	2	poor packaging and poor attitude of driver	2022-07-14 13:58:29.000
23	3	5	6	38	2	Delivered	2022-08-11 13:58:22.000	5	Fast Delivery!	2022-08-11 13:58:22.000
24	30	18	6	38	2	Delivered	2022-07-09 13:29:30.000	3	Poor driver attitude, slow delivery, wont buy again	2022-07-09 13:29:30.000
25	31	12	17	30	2	Delivered	2022-08-31 12:43:09.000	5	Great delivery	2022-08-31 12:43:09.000
26	32	10	3	40.5	3	Delivered	2022-08-22 19:59:02.000	5	Nice packaging	2022-08-22 19:59:02.000
27	33	20	19	29.4	2	Delivered	2022-07-23 16:58:40.000	4	Not so great book but bought for friends	2022-07-23 16:58:40.000
28	34	6	20	180	15	Delivered	2022-08-12 13:24:33.000	5	Great delivery	2022-08-12 13:24:33.000
29	35	19	18	29	2	Delivered	2022-07-16 13:49:30.000	5	Nice driver	2022-07-16 13:49:30.000
30	36	19	17	30	2	Delivered	2022-07-16 19:29:30.000	5	Nice	2022-07-16 19:29:30.000
31	37	19	19	29.4	2	Delivered	2022-07-15 16:48:23.000	4	Poor attitude of driver	2022-07-15 16:48:23.000
32	38	24	10	28	2	Delivered	2022-06-10 10:22:34.000	3	Poor packaging and bad book	2022-06-10 10:22:34.000
33	39	27	1	13.5	1	Delivered	2022-06-16 18:20:23.000	5	Nice book!	2022-06-16 18:20:23.000
34	4	17	12	12.7	1	Delivered	2022-07-15 18:32:25.000	4	Rude driver but good item	2022-07-15 18:32:25.000
35	40	26	17	75	5	Delivered	2022-06-23 19:20:32.000	5	Will recommend!	2022-06-23 19:20:32.000
36	41	25	11	15	1	Delivered	2022-06-14 13:23:45.000	3	Poor condition	2022-06-14 13:23:45.000
37	42	14	10	14	1	Delivered	2022-08-20 17:55:40.000	5	Nice packaging	2022-08-20 17:55:40.000
38	43	25	3	13.5	1	Delivered	2022-06-13 16:32:44.000	4	Great delivery	2022-06-13 16:32:44.000

39	44	6	11	30	2	Delivered	2022-08-10 14:50:22.000	5	Nice book!	2022-08-10 14:50:22.000
40	45	25	5	14	1	Delivered	2022-06-18 19:16:34.000	4	Nice book, but lacks interesting content	2022-06-18 19:16:34.000
41	46	24	1	13.5	1	Delivered	2022-06-12 13:59:23.000	5	Nice book!	2022-06-12 13:59:23.000
42	47	2	11	15	1	Delivered	2022-06-09 19:47:32.000	4	Packaging abit bad	2022-06-09 19:47:32.000
43	48	26	18	58	4	Delivered	2022-06-23 12:32:59.000	5	Great book	2022-06-23 12:32:59.000
44	49	10	12	25.4	2	Delivered	2022-08-25 07:04:20.000	5	Nice courier service!	2022-08-25 07:04:20.000
45	5	1	4	26	2	Delivered	2022-08-04 10:13:54.000	5	Nice book!	2022-08-04 10:13:54.000
46	50	29	26	74.9	5	Delivered	2022-08-16 18:23:25.000	4	Nice packaging	2022-08-16 18:23:25.000
47	51	35	7	20	1	Delivered	2022-09-12 10:23:22.000	5	Thanks	2022-09-12 10:23:22.000
48	52	15	12	25.4	2	Delivered	2022-08-23 16:49:50.000	5	NULL	2022-08-23 16:49:50.000
49	53	36	14	8	1	Delivered	2022-05-15 18:49:50.000	4	NULL	2022-05-15 18:49:50.000
50	54	32	22	13	1	Delivered	2022-06-03 18:49:23.000	4	bad service	2022-06-03 18:49:23.000
51	55	29	27	80	5	Delivered	2022-08-16 18:23:25.000	5	Great book!	2022-08-16 18:23:25.000
52	56	14	12	12.7	1	Delivered	2022-08-18 19:04:10.000	5	Nice	2022-08-18 19:04:10.000
53	57	34	25	16	1	Being Processed	NULL	NULL	NULL	NULL
54	58	26	10	14	1	Delivered	2022-06-29 12:58:32.000	4	Thanks	2022-06-29 12:58:32.000
55	59	14	11	15	1	Delivered	2022-08-21 09:20:21.000	5	Great delivery	2022-08-21 09:20:21.000
56	6	3	5	42	3	Delivered	2022-08-10 18:43:22.000	5	Bought for my friends	2022-08-19 18:43:22.000
57	60	36	48	20	1	Delivered	2022-05-16 10:23:48.000	5	Nice book	2022-05-16 10:23:48.000
58	61	30	28	65	5	Delivered	2022-08-27 19:20:25.000	5	Great packaging, buy again!	2022-08-27 19:20:25.000
59	62	30	26	74.9	5	Delivered	2022-08-26 18:21:25.000	4	Great book!	2022-08-26 18:21:25.000
60	63	16	13	26.4	2	Delivered	2022-08-14 11:54:32.000	5	Great book!	2022-08-14 11:54:32.000
61	64	31	26	74.9	5	Delivered	2022-08-15 12:58:32.000	5	Recommended by friend! Superb!	2022-08-15 12:58:32.000
62	65	32	35	7	1	Delivered	2022-06-04 19:30:23.000	4	Nice magazine, poor packaging!	2022-06-04 19:30:23.000
63	66	33	33	7	1	Shipped	NULL	NULL	NULL	NULL
64	67	4	10	28	2	Delivered	2022-08-13 10:23:45.000	5	Nice book	2022-08-13 10:23:45.000
65	68	33	41	14	1	Shipped	NULL	NULL	NULL	NULL
66	69	31	28	65	5	Delivered	2022-08-14 19:23:53.000	3	Poor packing on a such a great book	2022-08-14 19:23:53.000
67	7	18	12	25.4	2	Being Processed	NULL	NULL	NULL	NULL
68	70	13	11	30	2	Delivered	2022-08-27 14:25:47.000	5	Great delivery service.	2022-08-27 14:25:47.000
69	71	34	44	13	1	Shipped	NULL	NULL	NULL	NULL
70	72	7	11	30	2	Delivered	2022-08-04 10:20:43.000	5	Nice service! Definitely will order again	2022-08-04 10:20:43.000
71	73	35	46	14.5	1	Delivered	2022-09-13 14:23:59.000	4	poor attitude of courier driver, nice magazine tho	2022-09-13 14:23:59.000
72	74	12	10	14	1	Delivered	2022-08-29 11:23:50.000	5	Received as per shown on website	2022-08-29 11:23:50.000
73	8	8	4	26	2	Delivered	2022-08-16 19:15:32.000	5	Gift for friend!	2022-08-16 19:15:32.000
74	9	21	13	26.4	2	Delivered	2022-07-12 16:48:23.000	3	Bad packaging, slow delivery	2022-07-12 16:48:23.000

Orders Table

	order-ID	shipping-addr	shipping-cost	timestamp	customer-ID
1	1	8, Nanyang Drive, 637719	3	2022-07-23 20:34:10.000	1005
2	10	19 Pepys Rd, Singapore 118450	3.5	2022-08-20 15:38:12.000	1006
3	11	8 Bukit Batok Street 41, Singapore 657993	4	2022-08-24 23:15:29.000	1001
4	12	645 Jurong West Street 61, Singapore 640645	3.5	2022-08-27 19:29:12.000	1003
5	13	95 Jln Kampong Chantek, Singapore 588648	4	2022-08-25 00:29:32.000	1008
6	14	8, Nanyang Drive, 637719	3	2022-08-15 20:38:23.000	1005
7	15	8 Bukit Batok Street 41, Singapore 657993	4	2022-08-20 10:32:12.000	1001
8	16	367 Woodlands Ave 5, Singapore 730367	4	2022-08-12 00:29:23.000	1007
9	17	285B Toh Guan Rd, Singapore 602285	4	2022-07-13 17:12:39.000	1002
10	18	8 Bukit Batok Street 41, Singapore 657993	4	2022-07-01 16:32:10.000	1001
11	19	19 Pepys Rd, Singapore 118450	3.5	2022-07-09 19:58:23.000	1006
12	2	8 Bukit Batok Street 41, Singapore 657993	4	2022-07-31 12:34:10.000	1001
13	20	285B Toh Guan Rd, Singapore 602285	4	2022-07-18 16:45:32.000	1002
14	21	19 Pepys Rd, Singapore 118450	3.5	2022-07-10 17:58:32.000	1006
15	22	285B Toh Guan Rd, Singapore 602285	4	2022-07-20 23:25:49.000	1002
16	23	8 Bukit Batok Street 41, Singapore 657993	4	2022-06-02 02:58:32.000	1001
17	24	645 Jurong West Street 61, Singapore 640645	3.5	2022-06-07 12:48:59.000	1003
18	25	8 Bukit Batok Street 41, Singapore 657993	4	2022-06-10 11:59:32.000	1001
19	26	8, Nanyang Drive, 637719	3	2022-06-21 14:23:39.000	1005
20	27	285B Toh Guan Rd, Singapore 602285	4	2022-06-13 16:29:30.000	1002
21	28	42 Eng Neo Ave, Singapore 289533	4	2022-08-10 18:23:49.000	1004
22	29	95 Jln Kampong Chantek, Singapore 588648	4	2022-08-12 17:23:49.000	1008
23	3	645 Jurong West Street 61, Singapore 640645	3.5	2022-08-04 03:31:12.000	1003
24	30	645 Jurong West Street 61, Singapore 640645	3.5	2022-08-22 20:59:49.000	1003
25	31	645 Jurong West Street 61, Singapore 640645	3.5	2022-08-11 23:59:49.000	1003
26	32	8, Nanyang Drive, 637719	3	2022-06-01 08:29:59.000	1005
27	33	19 Pepys Rd, Singapore 118450	3.5	2022-09-15 22:19:59.000	1006
28	34	8, Nanyang Drive, 637719	3	2022-09-17 16:23:22.000	1005
29	35	367 Woodlands Ave 5, Singapore 730367	4	2022-09-08 20:25:23.000	1007
30	36	125 Whitley Rd, Singapore 297820	4.5	2022-05-13 23:58:23.000	1009
31	4	285B Toh Guan Rd, Singapore 602285	4	2022-08-01 11:32:12.000	1002
32	5	645 Jurong West Street 61, Singapore 640645	3.5	2022-08-03 09:23:58.000	1003
33	6	8, Nanyang Drive, 637719	3	2022-08-02 11:32:12.000	1005
34	7	42 Eng Neo Ave, Singapore 289533	4	2022-07-27 11:32:12.000	1004
35	8	125 Whitley Rd, Singapore 297820	4.5	2022-08-10 11:32:12.000	1009
36	9	8 Bukit Batok Street 41, Singapore 657993	4	2022-08-11 13:32:23.000	1001

PriceRecords Table

	time-updated	inventory-ID	price
1	2021-03-30 12:15:00.000	9	19.5
2	2021-03-31 12:00:00.000	7	20
3	2021-04-01 13:00:00.000	8	19.5
4	2021-09-10 12:00:00.000	2	23.5
5	2021-11-09 16:00:21.000	11	16.5
6	2021-12-09 00:00:00.000	10	16
7	2022-01-09 12:44:13.000	10	16.5
8	2022-01-09 15:13:20.000	12	17
9	2022-01-10 11:31:14.000	13	17
10	2022-02-26 14:14:15.000	14	11
11	2022-08-01 12:23:01.000	1	13.5
12	2022-08-11 13:30:25.000	3	13.5
13	2022-08-18 18:15:00.000	4	13.5
14	2022-08-27 19:30:00.000	5	14
15	2022-10-09 00:00:00.000	6	19
16	2022-11-23 13:11:11.000	15	12
17	2022-12-13 17:46:01.000	16	11.5

Queries

-- : Comments to explain the code.

1. Find the average price of “Harry Porter Finale” on Ahamazon from 1 August 2022 to 31 August 2022.

```
-- Get the average price of the price obtained.
SELECT ROUND(AVG(price),2) AS  'Average Price of Harry Porter Finale'
FROM Inventory AS I, Book AS B, PriceRecords AS R
-- Obtain title from Book, inventory-ID from Inventory to compare with PriceRecords' inventory-ID then get the price of the book in the month of August.
WHERE B.title = 'Harry Porter Finale'
AND I."publication-ID" = B."publication-ID"
AND R."inventory-ID" = I."inventory-ID"
AND R."time-updated" >= Convert(datetime, '2022-08-01' )
AND R."time-updated" <= Convert(datetime, '2022-08-31' );
```

Table Information:

```
SELECT B.title, R.[price], R.[time-updated]
FROM Inventory AS I, Book as B, PriceRecords as R
WHERE B.title = 'Harry Porter Finale' AND I."publication-ID" = B."publication-ID" AND
R."inventory-ID" = I."inventory-ID";
```

	title	price	time-updated
1	Harry Porter Finale	23.5	2021-09-10 12:00:00.000
2	Harry Porter Finale	13.5	2022-08-01 12:23:01.000
3	Harry Porter Finale	13.5	2022-08-11 13:30:25.000
4	Harry Porter Finale	13.5	2022-08-18 18:15:00.000
5	Harry Porter Finale	14	2022-08-27 19:30:00.000
6	Harry Porter Finale	19	2022-10-09 00:00:00.000

Query Result:

	Average Price of Harry Porter Finale
1	13.63

2. Find publications that received at least 10 ratings of “5” in August 2022, and rank them by their average ratings.

```
WITH MaxRatingCount AS (
-- create a view with publications (as publication-IDs) who got ratings of "5", along with the number of "5" ratings that they got.
    SELECT "publication-ID", COUNT(rating) AS maxRatingCnt
    FROM ItemsInOrder AS IIO, Inventory AS I
    WHERE rating = 5
    AND "date-time" >= Convert(datetime, '2022-08-01')
    AND "date-time" <= Convert(datetime, '2022-08-31')
    AND IIO."inventory-ID" = I."inventory-ID"
    GROUP BY "publication-ID"
)
SELECT
    CASE WHEN M.[publication-ID] IS NULL THEN B.title
        ELSE CONCAT(M.title, ', ' , M.issue)
    END AS title,
    ROUND(AVG(rating), 2) as avgRating
FROM ItemsInOrder AS IO, Inventory AS I, MaxRatingCount AS MC, Publication as P
LEFT JOIN Book B ON P.[publication-ID] = B.[publication-ID]
LEFT JOIN Magazine M ON P.[publication-ID] = M.[publication-ID]
WHERE MC."publication-ID" = I."publication-ID" AND I."publication-ID" =
P."publication-ID"
AND I."inventory-ID" = IO."inventory-ID"
AND MC.maxRatingCnt >= 10 -- Only select those with more than 10 ratings of "5"
GROUP BY
    CASE WHEN M.[publication-ID] IS NULL THEN B.title
        ELSE CONCAT(M.title, ', ' , M.issue)
    END
ORDER BY AVG(rating) DESC; -- Rank them by their average ratings
```

Table Information:

```
WITH MaxRatingCount AS (
     SELECT "publication-ID", COUNT(rating) AS maxRatingCnt
     FROM ItemsInOrder AS IIO, Inventory AS I
     WHERE rating = 5
     AND "date-time" >= Convert(datetime, '2022-08-01')
     AND "date-time" <= Convert(datetime, '2022-08-31')
     AND IIO."inventory-ID" = I."inventory-ID"
     GROUP BY "publication-ID"
)
SELECT
     CASE WHEN M.[publication-ID] IS NULL THEN B.title
         ELSE CONCAT(M.title, ', ' , M.issue)
     END AS title,
ROUND(AVG(rating), 2) as avgRating, MC.maxRatingCnt
FROM ItemsInOrder AS IO, Inventory AS I, MaxRatingCount AS MC, Publication as P
LEFT JOIN Book B ON P.[publication-ID] = B.[publication-ID]
LEFT JOIN Magazine M ON P.[publication-ID] = M.[publication-ID]
WHERE MC."publication-ID" = I."publication-ID" AND I."publication-ID" = P."publication-ID"
AND I."inventory-ID" = IO."inventory-ID"
GROUP BY CASE WHEN M.[publication-ID] IS NULL THEN B.title
         ELSE CONCAT(M.title, ', ' , M.issue)
     END, MC.maxRatingCnt;
```

	title	avgRating	maxRatingCnt
1	Global Sciences: Astronomy, Vol. 2 , No. 1	4.5	1
2	Art of War	4.33	3
3	Bridge to Terabithia	4.8	4
4	The Nightingale	4.83	5
5	Harry Porter Finale	4.47	10
6	Harry Porter: The Boy that Lifts	4.39	11

Query Result:

	title	avgRating
1	Harry Porter Finale	4.47
2	Harry Porter: The Boy that Lifts	4.39

3. For all publications purchased in June 2022 that have been delivered, find the average time from the ordering date to the delivery date.

```
SELECT AVG(CAST(DATEDIFF(day, O.timestamp, IO."delivery-date") AS DECIMAL(2)) ) as 'Average Time (in Days)' -- Get the difference in date between ordering date and delivery date, then take the average of them.
FROM Orders as O, ItemsInOrder as IO, Inventory as I, Publication as P
WHERE O."order-ID" = IO."order-ID"
AND IO.[inventory-ID] = I.[inventory-ID]
AND I.[publication-ID] = P.[publication-ID]
AND IO.status = 'Delivered'
AND O.timestamp >= Convert(datetime, '2022-06-01' )
AND O.timestamp <= Convert(datetime, '2022-06-30' ); -- Only take those where status in ItemsInOrder is "Delivered" and orders that have been placed(purchased) in June 2022.
```

Table Information:

```
SELECT

     CASE WHEN M.[publication-ID] IS NULL THEN B.title

         ELSE CONCAT(M.title, ', ' , M.issue)

     END AS title,

IO.[item-ID], O.timestamp, IO.[delivery-date], DATEDIFF(day, O.timestamp,
IO.[delivery-date]) AS dayDiff

FROM Orders as O, ItemsInOrder as IO, Inventory as I, Publication as P

LEFT JOIN Book B ON P.[publication-ID] = B.[publication-ID]

LEFT JOIN Magazine M ON P.[publication-ID] = M.[publication-ID]

WHERE O."order-ID" = IO."order-ID" AND IO.[inventory-ID] = I.[inventory-ID] AND
I.[publication-ID] = P.[publication-ID] AND IO.status = 'Delivered'

AND O.timestamp >= Convert(datetime, '2022-06-01' )

AND O.timestamp <= Convert(datetime, '2022-06-30' )  ;
```

	title	item-ID	timestamp	delivery-date	dayDiff
1	Harry Porter: The Boy that Lifts	38	2022-06-07 12:48:59.000	2022-06-10 10:22:34.000	3
2	Harry Porter Finale	39	2022-06-13 16:29:30.000	2022-06-16 18:20:23.000	3
3	The Nightingale	40	2022-06-21 14:23:39.000	2022-06-23 19:20:32.000	2
4	Harry Porter: The Boy that Lifts	41	2022-06-10 11:59:32.000	2022-06-14 13:23:45.000	4
5	Harry Porter Finale	43	2022-06-10 11:59:32.000	2022-06-13 16:32:44.000	3
6	Harry Porter Finale	45	2022-06-10 11:59:32.000	2022-06-18 19:16:34.000	8
7	Harry Porter Finale	46	2022-06-07 12:48:59.000	2022-06-12 13:59:23.000	5
8	The Nightingale	48	2022-06-21 14:23:39.000	2022-06-23 12:32:59.000	2
9	Bridge to Terabithia	54	2022-06-01 08:29:59.000	2022-06-03 18:49:23.000	2
10	Harry Porter: The Boy that Lifts	58	2022-06-21 14:23:39.000	2022-06-29 12:58:32.000	8
11	Lifestyle, No. 1	65	2022-06-01 08:29:59.000	2022-06-04 19:30:23.000	3

Query Result:

	Average Time (in Days)
1	3.909090

4. Let us define the “latency” of an employee by the average that he/she takes to process a complaint. Find the employee with the smallest latency.

```
WITH
    -- Create a view EmpLatency that stores the average latency for the processing of complaints for each employee that has addressed >= 1 complaint(s)
    EmpLatency AS (
     SELECT
       E.[employee-ID],
       E.name,
       -- Find average latency based on the difference in dates between ‘Being Handled’ and ‘Addressed’, i.e. time taken for an employee to process a complaint
       AVG(CAST(DATEDIFF(day, H1.date, H2.date) AS DECIMAL(2))) AS avgLatency
     FROM Complaints AS C, ComplaintHistory AS H1, ComplaintHistory AS H2, Employee AS E
     -- If a record in ComplaintHistory has the status as ‘Addressed’, it will also have another 2 records with the same complaint-ID that has the statuses ‘Being Handled’ and ‘Pending’
     WHERE H1.status = 'Being Handled' AND H2.status = 'Addressed'
     AND H1.[complaint-ID] = H2.[complaint-ID]
     AND C.[complaint-ID] = H1.[complaint-ID]
     AND E.[employee-ID] = C.[employee-ID]
     GROUP BY E.[employee-ID], E.name
    )
-- Find the employee with the smallest latency using EmpLatency
SELECT name
FROM EmpLatency
WHERE avgLatency = (SELECT MIN(avgLatency) FROM EmpLatency);
```

Table Information:

```
WITH EmpLatency AS (
        SELECT E.[employee-ID], E.name, DATEDIFF(day, H1.date, H2.date) AS latency
        FROM Complaints AS C, ComplaintHistory AS H1, ComplaintHistory AS H2, Employee AS E
        WHERE H1.status = 'Being Handled' AND H2.status = 'Addressed'
        AND H1.[complaint-ID] = H2.[complaint-ID]
        AND C.[complaint-ID] = H1.[complaint-ID]
        AND E.[employee-ID] = C.[employee-ID]
)
SELECT name, AVG(CAST(latency AS DECIMAL(2))) as avgLatency
FROM EmpLatency
GROUP BY name;
```

	name	avgLatency
1	Ben	2.000000
2	John	3.000000
3	Mike	1.500000
4	Sam	3.000000
5	Tom	2.250000

Query Result:

	name
1	Mike

5. Produce a list that contains (i) all publications published by Nanyang Publisher Company, and (ii) for each of them, the number of bookstores on Ahamazon that sell them.

```
SELECT
    -- If it is a book and not a magazine (M.publication-ID IS NULL), then we use the book title, else we use the magazine title concatenated with the issue number.
    CASE WHEN M.[publication-ID] IS NULL THEN B.title
        ELSE CONCAT(M.title, ', ' , M.issue)
    END AS title,
    -- Find corresponding number of bookstores
    COUNT("company-ID") AS 'Number of Bookstores'
FROM Inventory AS I,Publication AS P
LEFT JOIN Book B ON P.[publication-ID] = B.[publication-ID]
LEFT JOIN Magazine M ON P.[publication-ID] = M.[publication-ID]
WHERE P.publisher = 'Nanyang Publisher Company' AND P.[publication-ID] = I.[publication-ID]
GROUP BY
    CASE WHEN M.[publication-ID] IS NULL THEN B.title
        ELSE CONCAT(M.title, ', ' , M.issue)
    END;
```

Table Information:

```
SELECT CASE WHEN M.[publication-ID] IS NULL THEN B.title
            ELSE CONCAT(M.title, ', ' , M.issue)
       END AS title, COUNT("company-ID") AS 'Number of Bookstores', P.publisher
FROM Inventory AS I,Publication AS P
LEFT JOIN Book B ON P.[publication-ID] = B.[publication-ID]
LEFT JOIN Magazine M ON P.[publication-ID] = M.[publication-ID]
WHERE P.[publication-ID] = I.[publication-ID]
GROUP BY CASE WHEN M.[publication-ID] IS NULL THEN B.title
            ELSE CONCAT(M.title, ', ' , M.issue)
       END, P.publisher;
```

	title	Number of Bookstores	publisher
1	Bridge to Terabithia	3	Nanyang Publisher Company
2	Harry Porter Finale	6	Nanyang Publisher Company
3	Harry Porter: One in the Chamber	3	Nanyang Publisher Company
4	Harry Porter: The Boy that Lifts	4	Nanyang Publisher Company
5	The Catcher in the Rye	3	Nanyang Publisher Company
6	The Nightingale	3	Nanyang Publisher Company
7	Art of War	3	Penguin Publishers
8	Lifestyle, No. 1	3	Penguin Publishers
9	Lifestyle, No. 2	3	Penguin Publishers
10	Oxford Dictionary	3	Penguin Publishers
11	Stanford Dictionary	3	Penguin Publishers
12	Global Sciences: Astronomy, Vol. 2 , No. 1	3	Temasek Publisher Company
13	Global Sciences: Biology, Vol. 1 , No. 3	3	Temasek Publisher Company
14	Global Sciences: Chemistry, Vol. 1 , No. 1	3	Temasek Publisher Company
15	Global Sciences: Physics, Vol. 1 , No. 2	3	Temasek Publisher Company

Query Result:

	title	Number of Bookstores
1	Bridge to Terabithia	3
2	Harry Porter Finale	6
3	Harry Porter: One in the Chamber	3
4	Harry Porter: The Boy that Lifts	4
5	The Catcher in the Rye	3
6	The Nightingale	3

6. Find bookstores that made the most revenue in August 2022.

```
-- Create a view that gives the orders made in August 2022, along with the customer-ID, inventory-ID, total price of the item ordered as well as the item quantity
WITH AugustOrders AS (
    SELECT o.[order-ID], o.[customer-ID], io.[inventory-ID], io.[total-price], io.[item-qty]
    FROM Orders AS o
    JOIN ItemsInOrder AS io ON o.[order-ID] = io.[order-ID]
    WHERE o.timestamp >= '2022-08-01' AND o.timestamp < '2022-09-01'
),
-- Create a view that gives sum of all orders ordered from each bookstore as revenue
RevenuePerStore AS (
    SELECT b.[company-ID], SUM(ao.[total-price]) AS revenue
    FROM Bookstore b
    JOIN Inventory AS i ON b.[company-ID] = i.[company-ID]
    JOIN AugustOrders AS ao ON i.[inventory-ID] = ao.[inventory-ID]
    GROUP BY b.[company-ID]
)
-- Select the company-ID(Bookstore) that has the most revenue
SELECT [company-ID], revenue
FROM RevenuePerStore
WHERE revenue = (SELECT MAX(revenue) FROM RevenuePerStore);
```

Table Information:

```
WITH AugustOrders AS (
    SELECT o.[order-ID], o.[customer-ID], io.[inventory-ID], io.[total-price], io.[item-qty]
    FROM Orders AS o
    JOIN ItemsInOrder AS io ON o.[order-ID] = io.[order-ID]
    WHERE o.timestamp >= '2022-08-01' AND o.timestamp < '2022-09-01'
)

SELECT B.[company-ID], SUM(AO.[total-price]) AS revenue
FROM AugustOrders as AO, Bookstore B
JOIN Inventory AS I ON B.[company-ID] = I.[company-ID]
WHERE AO.[inventory-ID] = I.[inventory-ID]
GROUP BY B.[company-ID];
```

	company-ID	revenue
1	1	56
2	11	130
3	14	80
4	15	268.2
5	16	210
6	17	180
7	19	270
8	2	70.5
9	20	26.4
10	3	67.5
11	4	26
12	6	684
13	7	112
14	8	38
15	9	63.5

Query Result:

	company-ID	revenue
1	6	684

7. For customers that made the most number of complaints, find the most expensive publication he/she has ever purchased.

```
WITH
-- Create a view TOPUSER that stores the customer (as customer-ID) that has made the most number of complaints
TOPUSER AS (
	SELECT TOP 1 [customer-ID], COUNT([complaint-ID]) AS NumOfComplaint
	FROM Complaints
	GROUP BY [customer-ID]
	ORDER BY NumOfComplaint desc
),
-- Create a view MAXBYCOMPLAINT that stores the most expensive publication (as publication-ID) purchased by the customer-ID found in TOPUSER
MAXBYCOMPLAINT AS (
	SELECT I.[publication-ID],
		MAX(I.[selling-price]) AS price
	FROM Orders O
	JOIN ItemsInOrder IIO ON O.[order-ID] = IIO.[order-ID]
	JOIN Inventory AS I ON I.[inventory-ID] = IIO.[inventory-ID]
	WHERE O.[customer-ID] IN (SELECT [customer-ID] FROM TOPUSER)
	GROUP BY I.[publication-ID]
)
-- Find the title of the most expensive publication found in MAXBYCOMPLAINT
SELECT TOP 1 M.[publication-ID], T.title
FROM MAXBYCOMPLAINT as M
JOIN
(
	-- Subquery to identify the corresponding publication title given the publication-ID
	SELECT P.[publication-ID], (CASE WHEN B.title IS NULL THEN M.title ELSE B.title
	END) as title , M.issue,  P.[year of publication]
	FROM Publication AS P
	LEFT JOIN Book AS B ON P.[publication-ID]=B.[publication-ID]
	LEFT JOIN Magazine AS M ON P.[publication-ID]=M.[publication-ID]
) AS T ON T.[publication-ID] = M.[publication-ID]
ORDER BY M.price DESC
```

Table Information:

```
With
   TOPUSER AS (
   SELECT [customer-ID], count([complaint-ID]) as NumOfComplaint
   FROM Complaints
   Group by [customer-ID]
), MAXBYCOMPLAINT AS (
   select O.[customer-ID], [publication-ID] ,
   max(I.[selling-price]) as price
   from Orders O
   JOIN ItemsInOrder IIO on O.[order-ID] =IIO.[order-ID]
   JOIN Inventory AS I ON I.[inventory-ID] = IIO.[inventory-ID]
   Where O.[customer-ID] IN (Select [customer-ID] from TOPUSER)
   GROUP BY O.[customer-ID],[publication-ID]
)
SELECT M.*, NumOfComplaint
FROM MAXBYCOMPLAINT AS M
JOIN TOPUSER AS T ON M.[customer-ID] = T.[customer-ID]
WHERE M.price = (SELECT MAX(price)
                      FROM MAXBYCOMPLAINT AS M2
                      WHERE M2.[customer-ID] = T.[customer-ID])
ORDER BY M.price DESC;
```

	customer-ID	publication-ID	price	NumOfComplaint
1	1002	14	23.5	3
2	1009	15	20	1
3	1007	4	20	1
4	1003	14	19	3
5	1001	14	19	5
6	1008	10	16	1
7	1005	7	16	3
8	1006	3	15	2
9	1004	1	15	1

Query Result:

	publication-ID	title
1	14	Harry Porter Finale

8. Find publications that have never been purchased by any customer in July 2022, but are the top 3 most purchased publications in August 2022.

--Filter Inventory PublicationID to not contain all July PublicationID sales

--Also filter Inventory PublicationID to include only top 3 purchase of AUG Publication sales

```
SELECT DISTINCT I.[publication-ID],T.title
FROM Inventory I
JOIN (
    SELECT P.[publication-ID], (CASE WHEN B.title IS NULL THEN
CONCAT(M.title,',',M.issue) ELSE B.title END) as title, P.[year of publication]
    FROM Publication AS P
    LEFT JOIN Book AS B ON P.[publication-ID]=B.[publication-ID]
    LEFT JOIN Magazine AS M ON P.[publication-ID]=M.[publication-ID]
) AS T ON T.[publication-ID] = I.[publication-ID]
WHERE I.[publication-ID] NOT IN (
    SELECT [publication-ID]
    FROM Inventory AS Inv1
    WHERE Inv1.[inventory-ID] IN (
      SELECT IIO.[inventory-ID]
      FROM ItemsInOrder IIO
      WHERE IIO.[order-ID] IN (
             SELECT O.[order-ID]
             FROM [Orders] O
             WHERE (month(O.timestamp) = 7 AND YEAR(O.timestamp) = 2022)
      )
    )
)
AND I.[publication-ID] IN (
    SELECT [publication-ID] FROM (
      SELECT TOP 3 Inv2.[publication-ID], SUM(IIO.[item-qty]) AS purchased
      FROM ItemsInOrder AS IIO
      JOIN Inventory AS Inv2 ON Inv2.[inventory-ID] = IIO.[inventory-ID]
      WHERE IIO.[order-ID] IN (
             SELECT O.[order-ID]
             FROM [Orders] AS O
             WHERE (MONTH(O.timestamp) = 8 AND YEAR(O.timestamp) = 2022)
```

```
        )
        GROUP BY Inv2.[publication-ID]
        ORDER BY purchased DESC
    ) AS AUG
)
```

Table Information:

```
SELECT I.[publication-ID],T.title, month(O.timestamp) as monthPurchased,
COUNT(I.[publication-ID]) as timesPurchased

FROM Inventory I

JOIN (

    SELECT P.[publication-ID], (CASE WHEN B.title IS NULL THEN CONCAT(M.title,',',M.issue)
ELSE B.title END) as title, P.[year of publication]

    FROM Publication AS P

    LEFT JOIN Book AS B ON P.[publication-ID]=B.[publication-ID]

    LEFT JOIN Magazine AS M ON P.[publication-ID]=M.[publication-ID]

) AS T ON T.[publication-ID] = I.[publication-ID], ItemsInOrder AS IO, Orders as O

WHERE IO.[inventory-ID] = I.[inventory-ID] AND O.[order-ID] = IO.[order-ID] AND

((month(O.timestamp) = 7 AND year(O.timestamp) = 2022) OR (month(O.timestamp) = 8 AND
year(O.timestamp) = 2022))

GROUP BY I.[publication-ID], T.title, month(O.timestamp);
```

	publication-ID	title	monthPurchased	timesPurchased
1	1	Harry Porter: The Boy that Lifts	7	9
2	1	Harry Porter: The Boy that Lifts	8	10
3	10	Art of War	8	6
4	11	Global Sciences: Astronomy,Vol. 2 , No. 1	8	2
5	14	Harry Porter Finale	7	6
6	14	Harry Porter Finale	8	8
7	3	The Nightingale	7	6
8	3	The Nightingale	8	4
9	5	Bridge to Terabithia	8	4

Query Result:

	publication-ID	title
1	10	Art of War
2	11	Global Sciences: Astronomy,Vol. 2 , No. 1
3	5	Bridge to Terabithia

9. Find publications that are increasingly being purchased over at least 3 months.

--Create a view of number of publication sold each month

-----temp(publication, month, number of purchases)

--Join the same tables 3 times with the conditions same publication ID, every join add month + 1 to get the 3 month purchase values and filter based on month1 < month2 < month 3.

```
WITH temp AS (
    SELECT I.[publication-ID], MONTH(O.[timestamp]) AS [Month], SUM(IIO.[item-qty]) AS
purchase
    FROM ItemsInOrder AS IIO
    JOIN [Orders] AS O ON O.[order-ID] =  IIO.[order-ID]
    JOIN Inventory AS I ON I.[inventory-ID] = IIO.[inventory-ID]
    GROUP BY I.[publication-ID],MONTH(O.[timestamp])
    --ORDER BY I.[publication-ID],MONTH(O.[timestamp])
)
SELECT DISTINCT t1.[publication-ID], T.title --, t1.[Month] as M1, t1.purchase ,
t2.[Month] as M2, t2.purchase, t3.[Month] as M3, t3.purchase
FROM temp t1
LEFT JOIN temp t2 on t2.[Month] = t1.[Month] + 1 and t1.[publication-ID] =
t2.[publication-ID]
LEFT JOIN temp t3 on t3.[Month] = t1.[Month] + 2 and t1.[publication-ID] =
t3.[publication-ID]
JOIN (
    SELECT P.[publication-ID], (CASE WHEN B.title IS NULL THEN CONCAT(M.title, ', ',
M.issue) ELSE B.title END) AS title, P.[year of publication]
    FROM Publication AS P
    LEFT JOIN Book AS B ON P.[publication-ID]=B.[publication-ID]
    LEFT JOIN Magazine AS M ON P.[publication-ID]=M.[publication-ID]
) AS T ON T.[publication-ID] = t1.[publication-ID]
WHERE t1.purchase < t2.purchase
AND t2.purchase < t3.purchase;
```

Table Information:

```
WITH temp AS (
    SELECT I.[publication-ID], MONTH(O.[timestamp]) AS [Month], SUM(IIO.[item-qty]) AS purchase
    --into #temp
    FROM ItemsInOrder AS IIO
    JOIN [Orders] AS O ON O.[order-ID] =  IIO.[order-ID]
    JOIN Inventory AS I ON I.[inventory-ID] = IIO.[inventory-ID]
    GROUP BY I.[publication-ID],MONTH(O.[timestamp])
)
SELECT t1.[publication-ID], T.title , t1.[Month] as M1, t1.purchase , t2.[Month] as M2, t2.purchase, t3.[Month] as M3, t3.purchase
FROM temp t1
LEFT JOIN temp t2 on t2.[Month] = t1.[Month] + 1 and t1.[publication-ID] = t2.[publication-ID]
LEFT JOIN temp t3 on t3.[Month] = t1.[Month] + 2 and t1.[publication-ID] = t3.[publication-ID]
JOIN (
    SELECT P.[publication-ID], (CASE WHEN B.title IS NULL THEN CONCAT(M.title, ', ', M.issue) ELSE B.title END) AS title, P.[year of publication]
    FROM Publication AS P
    LEFT JOIN Book AS B ON P.[publication-ID]=B.[publication-ID]
    LEFT JOIN Magazine AS M ON P.[publication-ID]=M.[publication-ID]
) AS T ON T.[publication-ID] = t1.[publication-ID];
```

	publication-ID	title	M1	purchase	M2	purchase	M3	purchase
1	15	Stanford Dictionary	5	1	NULL	NULL	NULL	NULL
2	8	Oxford Dictionary	5	1	NULL	NULL	NULL	NULL
3	1	Harry Porter: The Boy that Lifts	6	4	7	13	8	16
4	12	Lifestyle, No. 1	6	1	NULL	NULL	NULL	NULL
5	14	Harry Porter Finale	6	4	7	14	8	20
6	3	The Nightingale	6	9	7	12	8	17
7	5	Bridge to Terabithia	6	1	NULL	NULL	8	57
8	1	Harry Porter: The Boy that Lifts	7	13	8	16	NULL	NULL
9	14	Harry Porter Finale	7	14	8	20	NULL	NULL
10	3	The Nightingale	7	12	8	17	NULL	NULL
11	1	Harry Porter: The Boy that Lifts	8	16	NULL	NULL	NULL	NULL
12	10	Art of War	8	30	NULL	NULL	NULL	NULL
13	11	Global Sciences: Astronomy, Vol. 2 , No. 1	8	30	NULL	NULL	NULL	NULL
14	14	Harry Porter Finale	8	20	NULL	NULL	NULL	NULL
15	3	The Nightingale	8	17	NULL	NULL	NULL	NULL
16	5	Bridge to Terabithia	8	57	NULL	NULL	NULL	NULL
17	13	Lifestyle, No. 2	9	1	NULL	NULL	NULL	NULL
18	2	Global Sciences: Chemistry, Vol. 1 , No. 1	9	1	NULL	NULL	NULL	NULL
19	4	Harry Porter: One in the Chamber	9	1	NULL	NULL	NULL	NULL
20	6	Global Sciences: Physics, Vol. 1 , No. 2	9	1	NULL	NULL	NULL	NULL
21	7	The Catcher in the Rye	9	1	NULL	NULL	NULL	NULL
22	9	Global Sciences: Biology, Vol. 1 , No. 3	9	1	NULL	NULL	NULL	NULL

Query Result:

	publication-ID	title
1	1	Harry Porter: The Boy that Lifts
2	14	Harry Porter Finale
3	3	The Nightingale

10. Find customers used to make complaint on a bookstore but continued to make purchases after the complaint
    - Customers who made a complaint on a bookstore: ComplaintHistory -> status = 'Pending' complaints to get the complaint-ID and the date(s)
    - Can then join this complaint-ID w/ BookstoreComplaints to get the corresponding company-ID
    - Using the company-ID, can find all corresponding inventory-IDs in Inventory
    - These inventory-IDs can then be matched w/ their corresponding records in ItemsInOrder join Orders (based on matching order-ID), and then check for Orders.timestamp that is > date(s)

```
-- Create view to find Customer making complaints on bookstore
------- CustCompHist(customer, complaint, the date they make complain and  the book store they make complain to)

-- Create view to find Customer placing order on bookstore
------- CustO(customer, order, when they make order, the bookstore they make order on)

-- Join CustCompHist and CustO based on condition of same customerID, same bookstore, and date of the complaint is before the date of purchasing order. Then we return the customer name

With
CustCompHist AS (
	SELECT C.[customer-ID], C.[complaint-ID], CH.[date] as d, B.[company-ID]  --,
	MONTH(CH.[date]) as M
	FROM [Complaints] AS C
	JOIN ComplaintHistory AS CH ON  C.[complaint-ID] = CH.[complaint-ID]
	JOIN BookstoreComplaint AS B ON B.[complaint-ID] = C.[complaint-ID]
),
CustO AS (
	SELECT O.[customer-ID] , O.[order-ID], O.[timestamp], I.[company-ID]
	FROM [Orders] AS O
	JOIN ItemsInOrder AS IIO ON O.[order-ID] = IIO.[order-ID]
	JOIN Inventory AS I ON I.[inventory-ID] = IIO.[inventory-ID]
)
SELECT DISTINCT C1.customerID, C1.name --* can change this part to SELECT * to have a more comprehensive view of the table obtained
FROM CustCompHist AS CH
JOIN CustO AS C
ON C.[customer-ID] = CH.[customer-ID]
AND C.[company-ID] = CH.[company-ID]
AND CH.d < C.[timestamp]
JOIN Customer AS C1 ON C1.[customerID] = C.[customer-ID]
```

Table Information:

```
With

CustCompHist AS (

SELECT C.[customer-ID], C.[complaint-ID], CH.[date] as d, B.[company-ID]  --,
MONTH(CH.[date]) as M

FROM [Complaints] AS C

JOIN ComplaintHistory AS CH ON  C.[complaint-ID] = CH.[complaint-ID]

JOIN BookstoreComplaint AS B ON B.[complaint-ID] = C.[complaint-ID]

), CustO AS (

select O.[customer-ID] , O.[order-ID], O.[timestamp], I.[company-ID]

from [Orders] AS O

JOIN ItemsInOrder AS IIO ON O.[order-ID] = IIO.[order-ID]

JOIN Inventory AS I ON I.[inventory-ID] = IIO.[inventory-ID]

)


Select CH.[customer-ID], CH.d AS complaintDate, CH.[company-ID] as bookstoreComplainted,
C.timestamp AS orderedDate,

C.[company-ID] AS orderedFrom, C1.name

from CustCompHist AS CH

JOIN CustO AS C

ON C.[customer-ID] = CH.[customer-ID]

and C.[company-ID] = CH.[company-ID]

JOIN Customer AS C1 ON C1.[customerID] =  C.[customer-ID]
```

	customer-ID	complaintDate	bookstoreComplainted	orderedDate	orderedFrom	name
1	1005	2022-08-19 00:00:00.000	7	2022-07-23 20:34:10.000	7	Eliza
2	1005	2022-08-17 00:00:00.000	7	2022-07-23 20:34:10.000	7	Eliza
3	1005	2022-08-16 00:00:00.000	7	2022-07-23 20:34:10.000	7	Eliza
4	1002	2022-07-17 00:00:00.000	2	2022-08-01 11:32:12.000	2	Beck
5	1002	2022-07-15 00:00:00.000	2	2022-08-01 11:32:12.000	2	Beck
6	1002	2022-07-14 00:00:00.000	2	2022-08-01 11:32:12.000	2	Beck
7	1001	2022-07-05 00:00:00.000	4	2022-07-01 16:32:10.000	4	Alan
8	1001	2022-07-03 00:00:00.000	4	2022-07-01 16:32:10.000	4	Alan
9	1001	2022-07-02 00:00:00.000	4	2022-07-01 16:32:10.000	4	Alan
10	1005	2022-08-19 00:00:00.000	7	2022-09-17 16:23:22.000	7	Eliza
11	1005	2022-08-17 00:00:00.000	7	2022-09-17 16:23:22.000	7	Eliza
12	1005	2022-08-16 00:00:00.000	7	2022-09-17 16:23:22.000	7	Eliza
13	1006	2022-07-11 00:00:00.000	10	2022-09-15 22:19:59.000	10	Fred
14	1006	2022-07-10 00:00:00.000	10	2022-09-15 22:19:59.000	10	Fred

Query Result:

	customerID	name
1	1002	Beck
2	1005	Eliza
3	1006	Fred