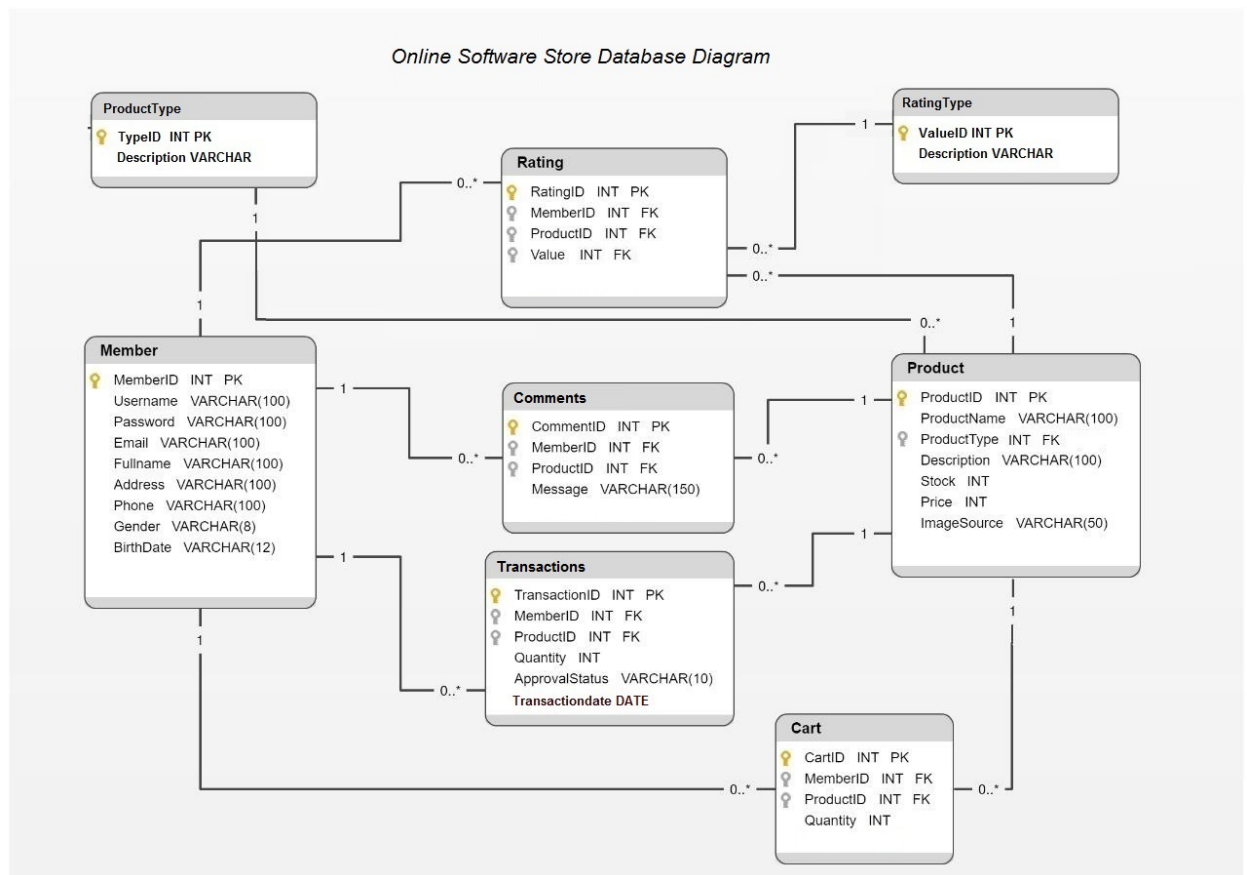Our Project is an online software store.

-How does the logic of an online store work?

There is a specific store that sells a specific product. In our case, this is a store where software products are sold.

-What roles are there?

There is a Client who buys a product online. And there is an admin, who approves or rejects Clients' requests.

The following is an E / R diagram of this project. It clearly shows what data the tables store and how they are related to each other. For example, the main table is "Product" and "Member". The data of the Client and the goods are stored there.

Online Software Store Database Diagram

ProductType
- TypeID INT PK
- Description VARCHAR

RatingType
- ValueID INT PK
- Description VARCHAR

Rating
- RatingID INT PK
- MemberID INT FK
- ProductID INT FK
- Value INT FK

Member
- MemberID INT PK
- Username VARCHAR(100)
- Password VARCHAR(100)
- Email VARCHAR(100)
- Fullname VARCHAR(100)
- Address VARCHAR(100)
- Phone VARCHAR(100)
- Gender VARCHAR(8)
- BirthDate VARCHAR(12)

Comments
- CommentID INT PK
- MemberID INT FK
- ProductID INT FK
- Message VARCHAR(150)

Product
- ProductID INT PK
- ProductName VARCHAR(100)
- ProductType INT FK
- Description VARCHAR(100)
- Stock INT
- Price INT
- ImageSource VARCHAR(50)

Transactions
- TransactionID INT PK
- MemberID INT FK
- ProductID INT FK
- Quantity INT
- ApprovalStatus VARCHAR(10)
- Transactiondate DATE

Cart
- CartID INT PK
- MemberID INT FK
- ProductID INT FK
- Quantity INT

We have divided the work into 3 parts.

1. Store design. We made it as easy and understandable as possible. Used JavaFx.
2. Database. Creation of the necessary tables, filling in data, as well as queries. This was the main part of the project, since almost half of the project is held up precisely because of this.
3. Documentation. Or rather, the introduction of the project, the E / R diagram, the very logic of the project.

For us, the most difficult thing in the project was the creation of the design, as well as some problems with queries in the database. Since there is no designer or developer front between us, this part was more difficult.

Here you can see in detail how we created the database for the online store, and how we linked them together.

--CREATE TABLES

--TABLE MEMBER

```
CREATE TABLE MEMBER (
        member_id NUMBER(20) PRIMARY KEY,
        username  VARCHAR(50) NOT NULL,
        password VARCHAR(20) NOT NULL,
        email VARCHAR(50) NOT NULL,
        fullname VARCHAR(50) NOT NULL,
        address VARCHAR(150) NOT NULL,
        phone VARCHAR(20) NOT NULL,
        gender VARCHAR(1),
        birthdate DATE
);
```

--TABLE PRODUCT

```
CREATE TABLE PRODUCT (
        product_id NUMBER(20) PRIMARY KEY,
        productname  VARCHAR(100) NOT NULL,
        producttype VARCHAR(100) NOT NULL,
        description VARCHAR(255) NOT NULL,
        stock NUMBER(20) NOT NULL,
        price NUMBER(20) NOT NULL,
        imagesource VARCHAR(255) NOT NULL
);
```

--TABLE PRODUCTTYPE

```
CREATE TABLE ProductType (
        TypeID NUMBER(10) PRIMARY KEY,
        description VARCHAR(200) NOT NULL
);
```

--TABLE RATINGTYPE

```
CREATE TABLE RatingType (
        valueid NUMBER(10) PRIMARY KEY,
        description VARCHAR(50) NOT NULL
);
```

--TABLE RATING

```
CREATE TABLE RATING (
        rating_id NUMBER(20) PRIMARY KEY,
        member_id NUMBER(20),
        product_id NUMBER(20),
        value NUMBER(20),
);
```

--TABLE COMMENTS

```sql
CREATE TABLE COMMENTS (
        comment_id NUMBER(20) PRIMARY KEY,
        member_id NUMBER(20),
        product_id NUMBER(20),
        message VARCHAR(255),
);
```

--TABLE TRANSACTIONS

```sql
CREATE TABLE TRANSACTIONS (
        transaction_id NUMBER(20) PRIMARY KEY,
        member_id NUMBER(20) NOT NULL,
        product_id NUMBER(20) NOT NULL,
        quantity NUMBER(20) NOT NULL,
        approvalstatus VARCHAR(10),
        transactiondate DATE
);
```

--TABLE CART

```sql
CREATE TABLE CART (
        cart_id NUMBER(20) PRIMARY KEY,
        member_id NUMBER(20) NOT NULL,
        product_id NUMBER(20) NOT NULL,
        quantity NUMBER(20),
        cartdate DATE
);
```

--CREATE RELATIONSHIPS

--RATING (member_id) -> MEMBER (member_id)

```sql
ALTER TABLE RATING
ADD CONSTRAINT FK_RATING_MEMBER FOREIGN KEY (member_id) REFERENCES MEMBER
(member_id);
```

--RATING (product_id) -> PRODUCT (product_id)

```sql
ALTER TABLE RATING
ADD CONSTRAINT FK_RATING_PRODUCT FOREIGN KEY (product_id) REFERENCES PRODUCT
(product_id);
```

--RATING (value) -> RATINGTYPE (valueid)

```sql
ALTER TABLE RATING
ADD CONSTRAINT FK_RATING_RATINGTYPE FOREIGN KEY (value) REFERENCES RATINGTYPE
(valueid);
```

--COMMENTS (member_id) -> MEMBER (member_id)

```sql
ALTER TABLE COMMENTS
ADD CONSTRAINT FK_COMMENTS_MEMBER FOREIGN KEY (member_id) REFERENCES MEMBER
(member_id);
```

--COMMENTS (product_id) -> PRODUCT (product_id)

```sql
ALTER TABLE COMMENTS
ADD CONSTRAINT FK_COMMENTS_PRODUCT FOREIGN KEY (product_id) REFERENCES
PRODUCT (product_id);
```

--TRANSACTIONS (member_id) -> MEMBER (member_id)

```sql
ALTER TABLE TRANSACTIONS
ADD CONSTRAINT FK_TRANSACTIONS_MEMBER FOREIGN KEY (member_id) REFERENCES
MEMBER (member_id);
```

--TRANSACTIONS (product_id) -> PRODUCT (product_id)

```sql
ALTER TABLE TRANSACTIONS
ADD CONSTRAINT FK_TRANSACTIONS_PRODUCT FOREIGN KEY (product_id) REFERENCES
PRODUCT (product_id);
```

--CART (member_id) -> MEMBER (member_id)

```sql
ALTER TABLE CART
ADD CONSTRAINT FK_CART_MEMBER FOREIGN KEY (member_id) REFERENCES MEMBER
(member_id);
```

-- CART (product_id) -> PRODUCT (product_id)

```sql
ALTER TABLE CART
ADD CONSTRAINT FK_CART_PRODUCT FOREIGN KEY (product_id) REFERENCES PRODUCT
(product_id);
```

-- PRODUCT (producttype) -> PRODUCTTYPE (typeID)

```sql
ALTER TABLE PRODUCT
ADD CONSTRAINT FK_PRODUCT_PRODUCTTYPE FOREIGN KEY (producttype) REFERENCES
PRODUCTTYPE (TypeID);
```

--INSERT TABLE DATA

--MEMBER

```sql
insert into MEMBER (member_id, username, password, email, fullname, address,
phone, gender, birthdate) values (1, 'jgilvary0', 'ANyJjChGhEU',
'jgilvary0@cocolog-nifty.com', 'Jorge Gilvary', '465 Quincy Terrace', '269-
213-9414', 'M', '31-May-2000');
insert into MEMBER (member_id, username, password, email, fullname, address,
phone, gender, birthdate) values (2, 'ilamie1', '0DndlsMUQr',
'ilamie1@dedecms.com', 'Inglis L''Amie', '04156 Twin Pines Place', '760-298-
8476', 'M', '26-May-1980');
```

```sql
insert into MEMBER (member_id, username, password, email, fullname, address,
phone, gender, birthdate) values (3, 'gshowering2', 'NdTKNWEJAR78',
'gshowering2@webnode.com', 'Gabriele Showering', '77 Bay Alley', '595-444-
9938', 'M', '13-Jun-1986');
insert into MEMBER (member_id, username, password, email, fullname, address,
phone, gender, birthdate) values (4, 'echerry3', 'wZZKg1kzaZdm',
'echerry3@list-manage.com', 'Eddie Cherry Holme', '98 Hintze Lane', '721-528-
0773', 'M', '25-Feb-1982');
insert into MEMBER (member_id, username, password, email, fullname, address,
phone, gender, birthdate) values (5, 'cpaoletto4', 'IQazv0oNrD',
'cpaoletto4@twitpic.com', 'Cross Paoletto', '9956 Hoffman Way', '502-856-
7345', 'M', '07-Oct-1966');
insert into MEMBER (member_id, username, password, email, fullname, address,
phone, gender, birthdate) values (6, 'treolfi5', '4p3WiE', 'treolfi5@go.com',
'Tonnie Reolfi', '331 Fuller Way', '377-460-0391', 'M', '24-Mar-1978');
insert into MEMBER (member_id, username, password, email, fullname, address,
phone, gender, birthdate) values (7, 'fstaner6', 'qqMLiP',
'fstaner6@jiathis.com', 'Francklin Staner', '007 Lighthouse Bay Hill', '288-
579-8409', 'M', '16-Mar-1989');
insert into MEMBER (member_id, username, password, email, fullname, address,
phone, gender, birthdate) values (8, 'cadanez7', 'MK6PlAwf2',
'cadanez7@nytimes.com', 'Chandler Adanez', '2925 Dahle Hill', '681-763-4018',
'M', '23-Oct-1974');
insert into MEMBER (member_id, username, password, email, fullname, address,
phone, gender, birthdate) values (9, 'lkimpton8', 'KirTDTi',
'lkimpton8@delicious.com', 'Lacey Kimpton', '3 Old Gate Junction', '198-743-
8894', 'F', '23-May-1962');
insert into MEMBER (member_id, username, password, email, fullname, address,
phone, gender, birthdate) values (10, 'lroadnight9', 'sdL0caMs3g',
'lroadnight9@123-reg.co.uk', 'Lorinda Roadnight', '22397 Forster Circle',
'718-571-4841', 'F', '05-Sep-1979');
```

--PRODUCTTYPE

```sql
insert into ProductType (Typeid, Description) VALUES(1, 'Windows');
insert into ProductType (Typeid, Description) VALUES(2, 'Solaris');
insert into ProductType (Typeid, Description) VALUES(3, 'Linux');
insert into ProductType (Typeid, Description) VALUES(4, 'Office');
insert into ProductType (Typeid, Description) VALUES(5, 'Graphic');
insert into ProductType (Typeid, Description) VALUES(6, 'Database');
```

--PRODUCT

```sql
insert into PRODUCT (product_id, productname, producttype, description,
stock, price, imagesource) values (1, 'Windows 10 64bit Pro', 1,
'Professional Desktop', 36, 14445,
'http://dummyimage.com/114x191.bmp/ff4444/ffffff');
insert into PRODUCT (product_id, productname, producttype, description,
stock, price, imagesource) values (2, 'Windows 7 64 bit Home Edition', 1,
'Home Desktop', 82, 14774,
'http://dummyimage.com/225x131.bmp/ff4444/ffffff');
insert into PRODUCT (product_id, productname, producttype, description,
stock, price, imagesource) values (3, 'Windows 10 64bit Home Edition', 1,
'Home Desktop', 39, 6864, 'http://dummyimage.com/145x249.png/cc0000/ffffff');
insert into PRODUCT (product_id, productname, producttype, description,
stock, price, imagesource) values (4, 'Solaris 11 64 bit', 2, 'Server OS',
43, 7267, 'http://dummyimage.com/191x158.bmp/5fa2dd/ffffff');
insert into PRODUCT (product_id, productname, producttype, description,
stock, price, imagesource) values (5, 'Windows Server 2016 Enterprise
```

```sql
Edition', 1, 'Server OS', 98, 18805,
'http://dummyimage.com/105x137.jpg/ff4444/ffffff');
insert into PRODUCT (product_id, productname, producttype, description,
stock, price, imagesource) values (6, 'Windows Server 2016 Standard Edition',
1, 'Server OS', 61, 15130,
'http://dummyimage.com/140x139.bmp/dddddd/000000');
insert into PRODUCT (product_id, productname, producttype, description,
stock, price, imagesource) values (7, 'Linux RedHat', 3, 'Server OS', 45,
8704, 'http://dummyimage.com/205x200.jpg/ff4444/ffffff');
insert into PRODUCT (product_id, productname, producttype, description,
stock, price, imagesource) values (8, 'Linux Debian', 3, 'Server OS', 49,
10908, 'http://dummyimage.com/118x157.jpg/5fa2dd/ffffff');
insert into PRODUCT (product_id, productname, producttype, description,
stock, price, imagesource) values (9, 'Linux Suse', 3, 'Professional
Desktop', 38, 15536, 'http://dummyimage.com/225x209.png/dddddd/000000');
insert into PRODUCT (product_id, productname, producttype, description,
stock, price, imagesource) values (10, 'Linux Mint', 3, 'Professional
Desktop', 55, 17922, 'http://dummyimage.com/248x120.bmp/5fa2dd/ffffff');
insert into PRODUCT (product_id, productname, producttype, description,
stock, price, imagesource) values (11, 'Microsoft Office 2016 Pro', 4,
'Professional Office', 88, 8880,
'http://dummyimage.com/209x153.bmp/cc0000/ffffff');
insert into PRODUCT (product_id, productname, producttype, description,
stock, price, imagesource) values (12, 'Microsoft Office 2016 Standard', 4,
'Standard Office', 80, 5963,
'http://dummyimage.com/146x127.jpg/dddddd/000000');
insert into PRODUCT (product_id, productname, producttype, description,
stock, price, imagesource) values (13, 'Microsoft Office 2013 Pro', 4,
'Professional Office', 62, 15719,
'http://dummyimage.com/183x115.png/ff4444/ffffff');
insert into PRODUCT (product_id, productname, producttype, description,
stock, price, imagesource) values (14, 'Microsoft Office 2013 Standard', 4,
'Standard Office', 66, 8406,
'http://dummyimage.com/244x162.bmp/cc0000/ffffff');
insert into PRODUCT (product_id, productname, producttype, description,
stock, price, imagesource) values (15, 'Adobe AutoCAD 2016', 5, 'Professional
Graphic Drawing', 80, 12079,
'http://dummyimage.com/220x219.bmp/ff4444/ffffff');
insert into PRODUCT (product_id, productname, producttype, description,
stock, price, imagesource) values (16, 'Adobe Primera', 5, 'Professional
Graphic Drawing', 48, 11805,
'http://dummyimage.com/244x138.png/ff4444/ffffff');
insert into PRODUCT (product_id, productname, producttype, description,
stock, price, imagesource) values (17, 'Oracle 18c', 6, 'Server Database',
11, 13105, 'http://dummyimage.com/241x246.png/cc0000/ffffff');
insert into PRODUCT (product_id, productname, producttype, description,
stock, price, imagesource) values (18, 'Microsoft SQL Server 2016', 6,
'Server Database', 94, 15954,
'http://dummyimage.com/196x208.png/dddddd/000000');
insert into PRODUCT (product_id, productname, producttype, description,
stock, price, imagesource) values (19, 'PostgreSQL Server 2018', 6, 'Server
Database', 66, 7405, 'http://dummyimage.com/198x123.jpg/ff4444/ffffff');
insert into PRODUCT (product_id, productname, producttype, description,
stock, price, imagesource) values (20, 'Oracle 12', 6, 'Server Database', 65,
8699, 'http://dummyimage.com/204x222.bmp/ff4444/ffffff');
-------------------------------------------------------------------------------------------------------------------

--TABLE TRANSACTIONS

insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1001, 2, 20, 5, 'APPROVED', '03-Aug-
2019');
```

```sql
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1002, 3, 3, 4, 'APPROVED', '28-Oct-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1003, 8, 3, 4, 'APPROVED', '10-Jan-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1004, 3, 7, 4, 'REJECTED', '22-Dec-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1005, 3, 19, 1, 'APPROVED', '08-Aug-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1006, 6, 11, 5, 'APPROVED', '06-Jul-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1007, 4, 2, 2, 'APPROVED', '03-Jul-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1008, 7, 19, 1, 'REJECTED', '29-Mar-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1009, 5, 5, 2, 'APPROVED', '03-Aug-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1010, 5, 17, 1, 'APPROVED', '03-Apr-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1011, 10, 1, 1, 'REJECTED', '05-Oct-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1012, 1, 4, 2, 'REJECTED', '12-Oct-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1013, 5, 12, 1, 'APPROVED', '22-Sep-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1014, 5, 2, 4, 'APPROVED', '06-Aug-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1015, 4, 6, 1, 'APPROVED', '08-Jul-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1016, 10, 8, 2, 'APPROVED', '11-Oct-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1017, 2, 20, 2, 'REJECTED', '23-Jan-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1018, 4, 15, 2, 'REJECTED', '05-Mar-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1019, 1, 14, 1, 'APPROVED', '26-Aug-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1020, 4, 5, 2, 'REJECTED', '04-Sep-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1021, 8, 14, 5, 'REJECTED', '30-Jun-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1022, 8, 18, 2, 'REJECTED', '25-Jan-
2019');
```

```sql
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1023, 6, 7, 1, 'REJECTED', '12-Mar-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1024, 3, 20, 2, 'APPROVED', '26-Jul-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1025, 5, 14, 4, 'REJECTED', '25-Aug-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1026, 9, 1, 3, 'REJECTED', '04-Mar-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1027, 2, 17, 4, 'REJECTED', '20-Nov-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1028, 5, 2, 5, 'APPROVED', '13-Mar-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1029, 5, 2, 5, 'APPROVED', '30-Sep-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1030, 10, 15, 4, 'REJECTED', '30-
Apr-2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1031, 2, 4, 3, 'APPROVED', '22-May-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1032, 3, 10, 5, 'APPROVED', '20-Jun-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1033, 2, 3, 2, 'APPROVED', '30-Oct-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1034, 3, 15, 2, 'REJECTED', '07-Aug-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1035, 8, 2, 5, 'REJECTED', '08-Jun-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1036, 6, 3, 4, 'REJECTED', '04-Jul-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1037, 10, 1, 4, 'APPROVED', '09-Dec-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1038, 8, 4, 4, 'REJECTED', '27-Jan-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1039, 9, 10, 5, 'REJECTED', '17-Jan-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1040, 1, 2, 4, 'APPROVED', '21-Jul-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1041, 6, 5, 5, 'APPROVED', '25-May-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1042, 8, 6, 2, 'APPROVED', '10-Mar-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1043, 7, 5, 1, 'REJECTED', '04-May-
2020');
```

```sql
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1044, 5, 17, 5, 'REJECTED', '09-Mar-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1045, 7, 12, 4, 'REJECTED', '25-Dec-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1046, 3, 12, 5, 'REJECTED', '15-May-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1047, 8, 12, 3, 'REJECTED', '24-Jan-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1048, 3, 4, 5, 'REJECTED', '05-Oct-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1049, 6, 10, 2, 'REJECTED', '11-Apr-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1050, 7, 16, 5, 'APPROVED', '10-Sep-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1051, 9, 8, 4, 'REJECTED', '13-Jul-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1052, 5, 15, 5, 'APPROVED', '30-Dec-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1053, 5, 15, 2, 'REJECTED', '30-Aug-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1054, 5, 1, 5, 'REJECTED', '29-Apr-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1055, 5, 2, 4, 'APPROVED', '17-Jan-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1056, 6, 3, 5, 'REJECTED', '07-Mar-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1057, 2, 9, 2, 'REJECTED', '08-Jul-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1058, 3, 2, 2, 'REJECTED', '17-Mar-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1059, 1, 16, 4, 'APPROVED', '11-Mar-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1060, 4, 20, 4, 'APPROVED', '25-Nov-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1061, 2, 7, 2, 'APPROVED', '01-May-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1062, 4, 17, 5, 'APPROVED', '29-Jan-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1063, 5, 2, 4, 'REJECTED', '19-Jul-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1064, 3, 9, 4, 'REJECTED', '13-May-
2019');
```

```sql
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1065, 5, 6, 2, 'REJECTED', '27-Oct-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1066, 4, 19, 1, 'REJECTED', '28-Oct-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1067, 8, 11, 2, 'REJECTED', '13-Oct-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1068, 2, 4, 5, 'REJECTED', '18-Jun-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1069, 8, 16, 5, 'APPROVED', '19-Feb-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1070, 4, 16, 1, 'REJECTED', '25-Mar-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1071, 6, 18, 1, 'REJECTED', '08-Jul-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1072, 4, 6, 1, 'APPROVED', '23-Sep-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1073, 10, 5, 5, 'REJECTED', '21-Feb-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1074, 2, 17, 1, 'REJECTED', '21-Mar-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1075, 5, 3, 1, 'APPROVED', '07-Sep-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1076, 10, 20, 4, 'APPROVED', '10-
Apr-2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1077, 4, 11, 4, 'REJECTED', '16-Nov-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1078, 9, 8, 5, 'REJECTED', '15-Apr-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1079, 5, 12, 4, 'REJECTED', '03-Jun-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1080, 8, 9, 1, 'REJECTED', '08-Nov-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1081, 8, 1, 2, 'REJECTED', '10-Nov-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1082, 9, 18, 5, 'REJECTED', '18-Sep-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1083, 10, 5, 1, 'REJECTED', '15-Jan-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1084, 7, 11, 2, 'REJECTED', '14-Jul-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1085, 3, 2, 1, 'REJECTED', '11-Mar-
2018');
```

```sql
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1086, 8, 15, 1, 'REJECTED', '05-Jun-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1087, 6, 18, 3, 'REJECTED', '29-Jun-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1088, 3, 20, 3, 'APPROVED', '10-Jun-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1089, 9, 9, 2, 'REJECTED', '18-Mar-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1090, 1, 7, 4, 'REJECTED', '26-Jun-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1091, 6, 4, 3, 'REJECTED', '24-Sep-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1092, 6, 13, 2, 'APPROVED', '02-Aug-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1093, 4, 6, 3, 'REJECTED', '08-Feb-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1094, 5, 18, 3, 'REJECTED', '26-Mar-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1095, 10, 3, 5, 'APPROVED', '31-Jan-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1096, 7, 17, 5, 'APPROVED', '19-Jul-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1097, 6, 5, 4, 'APPROVED', '24-Aug-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1098, 1, 4, 4, 'APPROVED', '25-Jun-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1099, 10, 1, 2, 'APPROVED', '25-Nov-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1100, 3, 2, 3, 'REJECTED', '26-Oct-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1101, 10, 15, 1, 'APPROVED', '31-
Jan-2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1102, 5, 2, 2, 'APPROVED', '17-May-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1103, 7, 12, 5, 'APPROVED', '14-Oct-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1104, 9, 6, 1, 'APPROVED', '17-Mar-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1105, 9, 16, 5, 'REJECTED', '11-Feb-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1106, 1, 11, 1, 'REJECTED', '08-Nov-
2019');
```

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insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1107, 8, 5, 4, 'APPROVED', '08-Mar-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1108, 9, 8, 4, 'APPROVED', '24-Mar-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1109, 8, 17, 4, 'REJECTED', '11-Jan-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1110, 3, 17, 2, 'REJECTED', '08-Oct-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1111, 3, 2, 1, 'APPROVED', '27-Feb-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1112, 8, 14, 5, 'REJECTED', '27-Jan-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1113, 6, 18, 1, 'APPROVED', '10-Mar-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1114, 2, 5, 1, 'APPROVED', '28-Oct-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1115, 5, 11, 4, 'REJECTED', '14-Nov-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1116, 4, 16, 4, 'REJECTED', '09-Apr-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1117, 9, 14, 5, 'REJECTED', '09-Nov-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1118, 9, 18, 2, 'REJECTED', '20-Oct-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1119, 10, 16, 1, 'REJECTED', '29-
Oct-2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1120, 6, 7, 2, 'APPROVED', '02-Feb-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1121, 1, 1, 3, 'REJECTED', '25-Sep-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1122, 7, 7, 2, 'APPROVED', '07-Dec-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1123, 8, 2, 2, 'REJECTED', '29-Jun-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1124, 10, 9, 1, 'APPROVED', '29-Oct-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1125, 5, 8, 1, 'APPROVED', '21-Jan-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1126, 9, 16, 1, 'APPROVED', '05-Oct-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1127, 9, 20, 5, 'REJECTED', '27-Oct-
2019');
```

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insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1128, 2, 7, 4, 'REJECTED', '14-Dec-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1129, 10, 19, 1, 'APPROVED', '02-
Aug-2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1130, 4, 13, 5, 'REJECTED', '07-Jun-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1131, 7, 20, 2, 'APPROVED', '13-Jan-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1132, 7, 6, 4, 'REJECTED', '15-Nov-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1133, 2, 2, 1, 'REJECTED', '28-Aug-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1134, 9, 17, 4, 'REJECTED', '20-Apr-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1135, 9, 12, 1, 'REJECTED', '16-Jul-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1136, 2, 18, 5, 'APPROVED', '17-Aug-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1137, 1, 17, 4, 'REJECTED', '19-Mar-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1138, 9, 20, 4, 'APPROVED', '16-Jan-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1139, 1, 8, 2, 'APPROVED', '24-Sep-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1140, 6, 2, 3, 'REJECTED', '13-Dec-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1141, 7, 16, 4, 'REJECTED', '16-Dec-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1142, 8, 13, 5, 'REJECTED', '05-Jul-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1143, 5, 5, 5, 'APPROVED', '21-Dec-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1144, 6, 1, 1, 'REJECTED', '05-Jul-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1145, 10, 5, 1, 'APPROVED', '26-Oct-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1146, 2, 4, 4, 'APPROVED', '29-Sep-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1147, 8, 12, 3, 'REJECTED', '29-Oct-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1148, 5, 11, 2, 'REJECTED', '30-Aug-
2019');
```

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insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1149, 1, 18, 2, 'REJECTED', '12-Feb-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1150, 9, 18, 1, 'APPROVED', '15-May-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1151, 2, 3, 3, 'APPROVED', '22-Jan-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1152, 8, 17, 2, 'REJECTED', '28-Aug-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1153, 8, 9, 5, 'APPROVED', '27-May-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1154, 3, 17, 1, 'APPROVED', '15-Oct-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1155, 4, 8, 4, 'REJECTED', '23-May-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1156, 5, 9, 1, 'APPROVED', '21-Mar-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1157, 9, 4, 1, 'REJECTED', '03-Oct-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1158, 2, 14, 5, 'REJECTED', '30-Jul-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1159, 1, 1, 3, 'APPROVED', '28-Feb-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1160, 1, 13, 1, 'REJECTED', '23-May-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1161, 6, 1, 2, 'REJECTED', '12-Aug-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1162, 6, 2, 2, 'REJECTED', '01-Mar-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1163, 2, 11, 1, 'REJECTED', '26-Feb-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1164, 1, 3, 4, 'REJECTED', '01-Mar-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1165, 1, 17, 1, 'REJECTED', '03-Mar-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1166, 6, 14, 4, 'REJECTED', '07-Dec-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1167, 9, 12, 1, 'REJECTED', '16-Oct-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1168, 8, 12, 4, 'APPROVED', '18-Mar-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1169, 3, 20, 5, 'REJECTED', '12-Jan-
2020');
```

```sql
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1170, 2, 11, 4, 'APPROVED', '12-Dec-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1171, 7, 5, 2, 'REJECTED', '26-Apr-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1172, 4, 7, 5, 'REJECTED', '31-Aug-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1173, 2, 18, 2, 'APPROVED', '14-Mar-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1174, 7, 16, 4, 'REJECTED', '26-Mar-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1175, 8, 18, 4, 'APPROVED', '13-Oct-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1176, 1, 1, 1, 'APPROVED', '19-Jun-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1177, 1, 3, 4, 'REJECTED', '18-Aug-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1178, 5, 15, 5, 'REJECTED', '18-Jul-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1179, 3, 12, 3, 'REJECTED', '11-Mar-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1180, 7, 10, 2, 'REJECTED', '22-Dec-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1181, 1, 15, 3, 'REJECTED', '02-Jun-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1182, 6, 8, 1, 'REJECTED', '05-Jan-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1183, 10, 15, 3, 'REJECTED', '25-
May-2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1184, 10, 4, 1, 'REJECTED', '13-Aug-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1185, 1, 8, 4, 'REJECTED', '15-Aug-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1186, 2, 20, 1, 'REJECTED', '03-Apr-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1187, 4, 4, 1, 'REJECTED', '06-Jun-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1188, 5, 10, 1, 'REJECTED', '25-Feb-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1189, 7, 11, 3, 'REJECTED', '06-Jan-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1190, 5, 4, 4, 'REJECTED', '11-Apr-
2018');
```

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insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1191, 8, 20, 4, 'REJECTED', '29-Aug-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1192, 8, 16, 2, 'APPROVED', '03-Mar-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1193, 1, 9, 2, 'REJECTED', '26-Nov-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1194, 7, 8, 5, 'APPROVED', '10-Jul-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1195, 9, 15, 4, 'APPROVED', '09-Jun-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1196, 10, 2, 5, 'REJECTED', '23-Nov-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1197, 6, 12, 2, 'APPROVED', '04-Sep-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1198, 7, 9, 5, 'APPROVED', '15-Jan-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1199, 10, 11, 3, 'REJECTED', '01-
Mar-2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1200, 10, 8, 2, 'APPROVED', '13-Feb-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1201, 10, 18, 5, 'APPROVED', '19-
Oct-2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1202, 5, 1, 2, 'APPROVED', '02-Oct-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1203, 9, 6, 4, 'APPROVED', '16-Sep-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1204, 8, 18, 3, 'REJECTED', '30-Jul-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1205, 9, 5, 1, 'APPROVED', '10-Nov-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1206, 8, 4, 4, 'REJECTED', '20-Aug-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1207, 8, 11, 5, 'APPROVED', '11-Aug-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1208, 9, 8, 5, 'APPROVED', '02-Jul-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1209, 6, 14, 2, 'APPROVED', '22-Oct-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1210, 6, 12, 5, 'APPROVED', '18-Dec-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1211, 2, 3, 3, 'REJECTED', '28-Apr-
2018');
```

```sql
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1212, 10, 11, 5, 'APPROVED', '06-
Feb-2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1213, 1, 6, 3, 'APPROVED', '02-Feb-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1214, 2, 1, 4, 'REJECTED', '23-Jul-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1215, 7, 17, 3, 'APPROVED', '27-Jun-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1216, 4, 6, 1, 'REJECTED', '30-Apr-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1217, 7, 15, 1, 'REJECTED', '16-Apr-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1218, 7, 11, 3, 'APPROVED', '29-Apr-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1219, 10, 7, 2, 'REJECTED', '06-Jul-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1220, 3, 18, 4, 'APPROVED', '25-Feb-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1221, 10, 15, 4, 'REJECTED', '17-
Jul-2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1222, 3, 9, 2, 'REJECTED', '04-Sep-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1223, 8, 7, 3, 'REJECTED', '25-Jun-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1224, 10, 7, 3, 'APPROVED', '03-Jul-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1225, 1, 12, 2, 'REJECTED', '11-Jun-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1226, 7, 15, 5, 'REJECTED', '01-Apr-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1227, 6, 3, 1, 'APPROVED', '06-Jul-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1228, 7, 6, 1, 'APPROVED', '13-Jul-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1229, 7, 8, 5, 'APPROVED', '06-Feb-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1230, 5, 19, 3, 'APPROVED', '09-Mar-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1231, 9, 16, 1, 'REJECTED', '23-May-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1232, 2, 10, 2, 'REJECTED', '18-May-
2019');
```

```sql
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1233, 8, 18, 2, 'REJECTED', '10-Apr-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1234, 8, 14, 2, 'APPROVED', '12-Dec-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1235, 2, 8, 3, 'REJECTED', '24-Mar-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1236, 3, 3, 4, 'REJECTED', '25-Feb-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1237, 10, 7, 3, 'REJECTED', '22-Oct-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1238, 1, 18, 1, 'APPROVED', '02-Apr-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1239, 5, 9, 1, 'REJECTED', '24-Nov-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1240, 6, 6, 4, 'APPROVED', '03-May-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1241, 3, 2, 2, 'APPROVED', '17-Aug-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1242, 6, 12, 2, 'APPROVED', '10-Jan-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1243, 10, 7, 2, 'REJECTED', '04-Sep-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1244, 2, 8, 4, 'APPROVED', '15-Jan-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1245, 5, 8, 2, 'APPROVED', '12-May-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1246, 6, 17, 2, 'REJECTED', '05-Apr-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1247, 6, 14, 2, 'REJECTED', '10-Oct-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1248, 7, 18, 4, 'APPROVED', '27-Feb-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1249, 6, 17, 2, 'APPROVED', '07-Apr-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1250, 10, 12, 1, 'APPROVED', '28-
Jun-2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1251, 3, 1, 5, 'REJECTED', '23-Jun-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1252, 5, 9, 1, 'REJECTED', '25-Aug-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1253, 6, 14, 3, 'REJECTED', '11-Mar-
2018');
```

```sql
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1254, 9, 4, 3, 'REJECTED', '18-Dec-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1255, 4, 10, 2, 'REJECTED', '25-Jan-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1256, 10, 1, 2, 'REJECTED', '18-Apr-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1257, 7, 19, 1, 'REJECTED', '07-Sep-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1258, 6, 7, 2, 'REJECTED', '31-Oct-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1259, 2, 14, 2, 'REJECTED', '29-Apr-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1260, 8, 16, 1, 'REJECTED', '23-Sep-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1261, 6, 13, 2, 'REJECTED', '04-Aug-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1262, 9, 19, 1, 'APPROVED', '25-Oct-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1263, 10, 18, 5, 'REJECTED', '10-
Jul-2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1264, 8, 14, 5, 'APPROVED', '27-May-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1265, 3, 20, 2, 'REJECTED', '11-May-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1266, 10, 1, 3, 'REJECTED', '05-Aug-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1267, 4, 2, 4, 'APPROVED', '26-Jan-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1268, 3, 20, 1, 'REJECTED', '14-Nov-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1269, 8, 4, 1, 'APPROVED', '25-Feb-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1270, 10, 1, 3, 'REJECTED', '09-Oct-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1271, 9, 14, 5, 'REJECTED', '15-Jul-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1272, 2, 8, 5, 'REJECTED', '02-Apr-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1273, 5, 8, 4, 'APPROVED', '22-Jan-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1274, 1, 19, 3, 'APPROVED', '31-Aug-
2020');
```

```sql
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1275, 6, 3, 3, 'APPROVED', '11-Jun-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1276, 10, 20, 1, 'REJECTED', '16-
Sep-2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1277, 8, 4, 5, 'APPROVED', '28-Apr-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1278, 6, 2, 5, 'APPROVED', '10-May-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1279, 2, 3, 3, 'APPROVED', '08-Oct-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1280, 1, 10, 5, 'APPROVED', '23-Nov-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1281, 5, 14, 4, 'REJECTED', '03-Jun-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1282, 5, 11, 1, 'APPROVED', '15-Sep-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1283, 7, 4, 2, 'APPROVED', '19-Jun-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1284, 2, 15, 4, 'APPROVED', '18-May-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1285, 6, 9, 2, 'REJECTED', '05-Jul-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1286, 2, 9, 4, 'REJECTED', '28-May-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1287, 10, 20, 4, 'APPROVED', '16-
Apr-2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1288, 3, 9, 3, 'REJECTED', '19-Nov-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1289, 6, 10, 2, 'REJECTED', '06-Jul-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1290, 7, 4, 5, 'REJECTED', '13-Aug-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1291, 2, 3, 5, 'APPROVED', '10-Jun-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1292, 5, 17, 2, 'REJECTED', '12-Mar-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1293, 4, 13, 5, 'REJECTED', '03-Oct-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1294, 1, 12, 5, 'REJECTED', '02-Mar-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1295, 10, 10, 3, 'APPROVED', '15-
Oct-2020');
```

```sql
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1296, 5, 11, 1, 'APPROVED', '19-Jul-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1297, 5, 8, 1, 'REJECTED', '10-Oct-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1298, 1, 4, 3, 'APPROVED', '05-Feb-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1299, 10, 16, 4, 'REJECTED', '01-
Jun-2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1300, 10, 4, 5, 'APPROVED', '24-Jun-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1301, 6, 16, 5, 'REJECTED', '25-Dec-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1302, 3, 9, 1, 'REJECTED', '31-Mar-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1303, 7, 4, 2, 'REJECTED', '10-Feb-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1304, 5, 8, 3, 'REJECTED', '18-May-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1305, 10, 8, 2, 'APPROVED', '22-Jun-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1306, 4, 10, 2, 'APPROVED', '19-Mar-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1307, 1, 1, 4, 'APPROVED', '08-Nov-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1308, 7, 5, 4, 'APPROVED', '30-Jul-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1309, 1, 8, 1, 'APPROVED', '11-Jul-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1310, 9, 16, 5, 'REJECTED', '18-Apr-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1311, 6, 4, 3, 'REJECTED', '07-Aug-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1312, 10, 3, 2, 'APPROVED', '19-Oct-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1313, 4, 4, 3, 'REJECTED', '06-Jan-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1314, 6, 4, 2, 'REJECTED', '08-Jul-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1315, 8, 16, 5, 'APPROVED', '10-Aug-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1316, 8, 10, 4, 'REJECTED', '07-May-
2020');
```

```sql
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1317, 7, 1, 4, 'APPROVED', '09-Jun-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1318, 4, 17, 3, 'REJECTED', '26-May-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1319, 8, 1, 5, 'APPROVED', '14-Jan-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1320, 3, 9, 5, 'REJECTED', '03-Oct-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1321, 3, 17, 1, 'APPROVED', '12-Mar-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1322, 2, 20, 1, 'APPROVED', '14-Aug-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1323, 3, 20, 3, 'APPROVED', '16-Feb-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1324, 1, 6, 2, 'REJECTED', '11-Oct-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1325, 2, 9, 1, 'APPROVED', '20-Nov-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1326, 5, 2, 3, 'REJECTED', '04-Dec-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1327, 2, 7, 1, 'APPROVED', '22-May-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1328, 5, 10, 3, 'APPROVED', '25-Apr-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1329, 1, 20, 3, 'APPROVED', '30-Mar-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1330, 6, 13, 2, 'APPROVED', '26-Jul-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1331, 9, 13, 4, 'APPROVED', '27-Nov-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1332, 7, 16, 1, 'APPROVED', '19-Jun-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1333, 1, 4, 2, 'APPROVED', '30-Mar-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1334, 5, 17, 1, 'REJECTED', '02-May-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1335, 7, 19, 5, 'APPROVED', '10-May-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1336, 9, 17, 2, 'REJECTED', '16-Jan-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1337, 1, 6, 4, 'APPROVED', '14-May-
2020');
```

```sql
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1338, 1, 4, 2, 'APPROVED', '18-Mar-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1339, 7, 19, 5, 'APPROVED', '05-Sep-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1340, 8, 15, 2, 'REJECTED', '05-Aug-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1341, 4, 9, 1, 'APPROVED', '12-Sep-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1342, 4, 5, 3, 'APPROVED', '24-Feb-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1343, 8, 1, 1, 'REJECTED', '29-Aug-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1344, 9, 12, 4, 'REJECTED', '30-Aug-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1345, 4, 8, 3, 'APPROVED', '17-Oct-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1346, 6, 6, 5, 'APPROVED', '25-Jul-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1347, 3, 15, 1, 'REJECTED', '06-Jun-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1348, 1, 10, 3, 'REJECTED', '13-May-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1349, 10, 11, 3, 'APPROVED', '23-
Jan-2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1350, 7, 17, 5, 'APPROVED', '30-Jun-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1351, 8, 6, 4, 'APPROVED', '19-Oct-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1352, 8, 16, 3, 'REJECTED', '11-Dec-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1353, 6, 15, 3, 'APPROVED', '22-Aug-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1354, 8, 15, 1, 'APPROVED', '21-May-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1355, 6, 13, 3, 'REJECTED', '06-May-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1356, 1, 2, 3, 'APPROVED', '04-Apr-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1357, 5, 18, 2, 'REJECTED', '12-Jan-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1358, 5, 19, 5, 'REJECTED', '22-May-
2019');
```

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insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1359, 1, 3, 1, 'REJECTED', '20-Mar-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1360, 2, 13, 5, 'REJECTED', '05-Apr-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1361, 10, 16, 1, 'APPROVED', '03-
Oct-2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1362, 7, 4, 3, 'APPROVED', '26-Jul-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1363, 10, 12, 4, 'APPROVED', '04-
Apr-2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1364, 3, 18, 2, 'APPROVED', '07-Mar-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1365, 2, 8, 2, 'APPROVED', '27-Sep-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1366, 1, 3, 4, 'REJECTED', '04-Dec-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1367, 4, 3, 4, 'APPROVED', '12-Mar-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1368, 8, 5, 1, 'APPROVED', '27-May-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1369, 6, 8, 2, 'REJECTED', '26-May-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1370, 7, 20, 5, 'APPROVED', '04-Jul-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1371, 7, 6, 4, 'APPROVED', '02-Jul-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1372, 7, 16, 5, 'REJECTED', '17-Dec-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1373, 1, 11, 1, 'REJECTED', '15-Jun-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1374, 6, 5, 5, 'APPROVED', '28-Jan-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1375, 4, 9, 1, 'REJECTED', '05-Jun-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1376, 3, 4, 1, 'REJECTED', '25-Sep-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1377, 9, 17, 4, 'REJECTED', '04-Sep-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1378, 2, 17, 4, 'APPROVED', '27-Aug-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1379, 7, 13, 3, 'REJECTED', '25-Jul-
2020');
```

```sql
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1380, 7, 16, 3, 'APPROVED', '12-Oct-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1381, 2, 11, 4, 'REJECTED', '10-Jan-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1382, 10, 16, 3, 'APPROVED', '20-
Apr-2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1383, 4, 7, 3, 'REJECTED', '23-Nov-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1384, 6, 16, 5, 'REJECTED', '01-Oct-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1385, 6, 15, 2, 'APPROVED', '23-Feb-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1386, 3, 18, 1, 'APPROVED', '06-Jun-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1387, 3, 3, 2, 'REJECTED', '02-Jul-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1388, 6, 13, 2, 'REJECTED', '20-Aug-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1389, 4, 9, 3, 'APPROVED', '24-Mar-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1390, 10, 14, 3, 'APPROVED', '21-
Oct-2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1391, 6, 5, 1, 'REJECTED', '16-Aug-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1392, 10, 10, 1, 'APPROVED', '05-
Jan-2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1393, 1, 9, 2, 'APPROVED', '02-Jan-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1394, 6, 19, 3, 'REJECTED', '01-Jun-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1395, 9, 15, 2, 'APPROVED', '05-Jan-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1396, 2, 9, 2, 'APPROVED', '11-Jun-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1397, 3, 14, 2, 'REJECTED', '20-Jun-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1398, 8, 7, 3, 'APPROVED', '05-Jun-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1399, 5, 20, 1, 'REJECTED', '05-Nov-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1400, 9, 1, 4, 'REJECTED', '30-Aug-
2020');
```

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insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1401, 5, 1, 4, 'REJECTED', '11-Feb-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1402, 8, 19, 3, 'APPROVED', '17-Aug-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1403, 3, 7, 2, 'APPROVED', '14-Nov-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1404, 10, 3, 1, 'REJECTED', '05-Jun-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1405, 8, 13, 3, 'REJECTED', '05-Apr-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1406, 6, 19, 3, 'APPROVED', '14-Feb-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1407, 9, 4, 5, 'APPROVED', '05-Mar-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1408, 4, 14, 3, 'REJECTED', '07-Apr-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1409, 10, 11, 4, 'REJECTED', '11-
Aug-2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1410, 5, 2, 4, 'APPROVED', '25-Feb-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1411, 10, 1, 1, 'REJECTED', '24-Jun-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1412, 7, 1, 3, 'REJECTED', '14-Apr-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1413, 10, 4, 1, 'REJECTED', '01-Jan-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1414, 3, 12, 1, 'REJECTED', '27-Sep-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1415, 4, 2, 3, 'REJECTED', '09-Jan-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1416, 8, 12, 5, 'REJECTED', '19-Sep-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1417, 9, 19, 1, 'REJECTED', '12-Jun-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1418, 9, 10, 3, 'APPROVED', '14-Apr-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1419, 6, 9, 5, 'APPROVED', '10-Apr-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1420, 6, 5, 5, 'APPROVED', '25-Sep-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1421, 7, 19, 2, 'APPROVED', '25-Sep-
2019');
```

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insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1422, 3, 15, 4, 'REJECTED', '30-Apr-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1423, 4, 9, 5, 'APPROVED', '04-Jan-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1424, 3, 7, 3, 'REJECTED', '03-Jul-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1425, 1, 1, 5, 'REJECTED', '08-Mar-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1426, 7, 14, 5, 'APPROVED', '13-Jan-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1427, 2, 5, 3, 'REJECTED', '24-Sep-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1428, 6, 11, 4, 'REJECTED', '06-Jun-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1429, 8, 3, 4, 'APPROVED', '28-Oct-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1430, 4, 15, 4, 'REJECTED', '10-Mar-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1431, 8, 5, 4, 'APPROVED', '05-Nov-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1432, 4, 14, 4, 'APPROVED', '02-Mar-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1433, 3, 19, 4, 'REJECTED', '03-Sep-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1434, 8, 1, 1, 'REJECTED', '08-Mar-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1435, 2, 2, 1, 'APPROVED', '01-Jul-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1436, 7, 2, 3, 'REJECTED', '22-Jun-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1437, 6, 5, 4, 'APPROVED', '23-Mar-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1438, 5, 19, 4, 'REJECTED', '21-Sep-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1439, 9, 9, 5, 'REJECTED', '10-Mar-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1440, 7, 15, 2, 'APPROVED', '18-Aug-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1441, 3, 7, 3, 'APPROVED', '05-Feb-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1442, 3, 4, 4, 'APPROVED', '22-Oct-
2018');
```

```sql
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1443, 9, 13, 4, 'APPROVED', '15-Aug-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1444, 4, 19, 2, 'REJECTED', '06-Feb-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1445, 6, 8, 2, 'APPROVED', '23-Jun-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1446, 4, 3, 1, 'APPROVED', '19-Jun-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1447, 3, 14, 4, 'APPROVED', '28-May-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1448, 2, 2, 1, 'APPROVED', '15-Jun-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1449, 4, 5, 4, 'APPROVED', '25-Jan-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1450, 4, 18, 5, 'REJECTED', '17-Aug-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1451, 3, 16, 1, 'APPROVED', '27-Jan-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1452, 7, 15, 3, 'REJECTED', '15-Mar-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1453, 8, 8, 5, 'APPROVED', '04-Jun-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1454, 7, 17, 4, 'REJECTED', '26-Mar-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1455, 2, 13, 1, 'REJECTED', '28-Jul-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1456, 9, 18, 5, 'REJECTED', '14-Apr-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1457, 8, 11, 3, 'REJECTED', '23-May-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1458, 9, 4, 1, 'REJECTED', '22-Apr-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1459, 7, 18, 5, 'REJECTED', '10-Aug-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1460, 10, 9, 1, 'APPROVED', '25-Jan-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1461, 5, 15, 3, 'REJECTED', '30-May-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1462, 4, 11, 4, 'APPROVED', '11-Sep-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1463, 10, 2, 5, 'REJECTED', '03-May-
2018');
```

```sql
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1464, 1, 12, 4, 'APPROVED', '10-May-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1465, 2, 4, 3, 'APPROVED', '12-Sep-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1466, 7, 17, 2, 'APPROVED', '03-Mar-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1467, 3, 1, 4, 'REJECTED', '14-Oct-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1468, 3, 12, 5, 'REJECTED', '07-Nov-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1469, 4, 18, 3, 'REJECTED', '03-Jan-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1470, 10, 1, 4, 'APPROVED', '18-Nov-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1471, 3, 1, 1, 'REJECTED', '13-May-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1472, 1, 1, 5, 'REJECTED', '03-Jul-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1473, 1, 16, 3, 'APPROVED', '31-Oct-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1474, 1, 7, 3, 'REJECTED', '11-Feb-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1475, 10, 14, 1, 'REJECTED', '21-
Jul-2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1476, 9, 1, 5, 'APPROVED', '02-Mar-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1477, 1, 5, 3, 'APPROVED', '31-Mar-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1478, 9, 11, 5, 'APPROVED', '27-Mar-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1479, 6, 11, 2, 'REJECTED', '25-Oct-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1480, 10, 1, 2, 'REJECTED', '16-Feb-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1481, 5, 1, 1, 'APPROVED', '07-Jan-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1482, 4, 15, 3, 'REJECTED', '29-Aug-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1483, 2, 7, 3, 'APPROVED', '16-Feb-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1484, 7, 13, 2, 'REJECTED', '05-Jun-
2018');
```

```sql
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1485, 9, 11, 1, 'APPROVED', '26-Mar-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1486, 3, 18, 2, 'REJECTED', '21-Jul-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1487, 3, 4, 4, 'APPROVED', '05-Mar-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1488, 1, 14, 5, 'APPROVED', '07-Sep-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1489, 5, 10, 5, 'APPROVED', '11-Apr-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1490, 10, 4, 5, 'REJECTED', '19-May-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1491, 9, 11, 2, 'REJECTED', '27-Dec-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1492, 7, 5, 2, 'APPROVED', '21-Mar-
2018');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1493, 6, 16, 4, 'APPROVED', '02-Aug-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1494, 7, 20, 5, 'APPROVED', '15-Jan-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1495, 9, 18, 1, 'REJECTED', '28-May-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1496, 9, 10, 3, 'REJECTED', '27-Apr-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1497, 7, 3, 4, 'REJECTED', '29-Jan-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1498, 4, 13, 3, 'APPROVED', '30-Dec-
2019');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1499, 9, 5, 5, 'REJECTED', '10-Jan-
2020');
insert into TRANSACTIONS (transaction_id, member_id, product_id, quantity,
approvalstatus, transactiondate) values (1500, 2, 17, 1, 'REJECTED', '07-Apr-
2018');
```

--TABLE CART

```sql
DECLARE

    i NUMBER := 10000;

    member_id NUMBER(20);
    product_id NUMBER(20);
    quantity NUMBER(20);

CURSOR cur IS SELECT m.member_id,
                 p.product_id,
                 quantity
```

```
                  FROM Transactions t
                       INNER JOIN Member m ON t.member_id = m.member_id
                       INNER JOIN Product p ON t.product_id = p.product_id
                       AND t.approvalstatus = 'APPROVED';
    BEGIN
       OPEN cur;
          LOOP FETCH cur INTO member_id, product_id, quantity;
       EXIT WHEN cur%NOTFOUND;
              i := i + 1;
               INSERT INTO CART VALUES(i, member_id, product_id, quantity);
           END LOOP;
END;
```

--TABLE RATINGTYPE

```
INSERT INTO RatingType (Valueid, Description) VALUES (1, 'Highly
Dissatisfied');
INSERT INTO RatingType (Valueid, Description) VALUES (2, 'Dissatisfied');
INSERT INTO RatingType (Valueid, Description) VALUES (3, 'Neutral');
INSERT INTO RatingType (Valueid, Description) VALUES (4, 'Satisfied');
INSERT INTO RatingType (Valueid, Description) VALUES (5, 'Highly Satisfied');
```

--TABLE RATING

```
insert into RATING (rating_id, member_id, product_id, value) values (1, 1, 1,
1);
insert into RATING (rating_id, member_id, product_id, value) values (2, 1, 5,
1);
insert into RATING (rating_id, member_id, product_id, value) values (3, 1, 6,
4);
insert into RATING (rating_id, member_id, product_id, value) values (4, 1, 9,
5);
insert into RATING (rating_id, member_id, product_id, value) values (5, 1,
10, 3);
insert into RATING (rating_id, member_id, product_id, value) values (6, 1,
12, 2);
insert into RATING (rating_id, member_id, product_id, value) values (7, 1,
17, 4);
insert into RATING (rating_id, member_id, product_id, value) values (8, 1,
18, 5);
insert into RATING (rating_id, member_id, product_id, value) values (9, 2, 1,
4);
insert into RATING (rating_id, member_id, product_id, value) values (10, 2,
2, 2);
insert into RATING (rating_id, member_id, product_id, value) values (11, 2,
5, 1);
insert into RATING (rating_id, member_id, product_id, value) values (12, 2,
9, 4);
insert into RATING (rating_id, member_id, product_id, value) values (13, 2,
10, 5);
insert into RATING (rating_id, member_id, product_id, value) values (14, 2,
18, 4);
insert into RATING (rating_id, member_id, product_id, value) values (15, 2,
20, 1);
insert into RATING (rating_id, member_id, product_id, value) values (16, 3,
11, 2);
insert into RATING (rating_id, member_id, product_id, value) values (17, 3,
16, 3);
insert into RATING (rating_id, member_id, product_id, value) values (18, 3,
20, 4);
```

```sql
insert into RATING (rating_id, member_id, product_id, value) values (19, 4,
1, 3);
insert into RATING (rating_id, member_id, product_id, value) values (20, 4,
8, 4);
insert into RATING (rating_id, member_id, product_id, value) values (21, 4,
9, 5);
insert into RATING (rating_id, member_id, product_id, value) values (22, 4,
14, 3);
insert into RATING (rating_id, member_id, product_id, value) values (23, 4,
15, 2);
insert into RATING (rating_id, member_id, product_id, value) values (24, 4,
20, 3);
insert into RATING (rating_id, member_id, product_id, value) values (25, 5,
6, 4);
insert into RATING (rating_id, member_id, product_id, value) values (26, 5,
10, 3);
insert into RATING (rating_id, member_id, product_id, value) values (27, 5,
11, 1);
insert into RATING (rating_id, member_id, product_id, value) values (28, 5,
12, 3);
insert into RATING (rating_id, member_id, product_id, value) values (29, 5,
17, 3);
insert into RATING (rating_id, member_id, product_id, value) values (30, 5,
18, 1);
insert into RATING (rating_id, member_id, product_id, value) values (31, 5,
20, 2);
insert into RATING (rating_id, member_id, product_id, value) values (32, 6,
2, 2);
insert into RATING (rating_id, member_id, product_id, value) values (33, 6,
8, 3);
insert into RATING (rating_id, member_id, product_id, value) values (34, 6,
9, 1);
insert into RATING (rating_id, member_id, product_id, value) values (35, 6,
10, 3);
insert into RATING (rating_id, member_id, product_id, value) values (36, 6,
11, 5);
insert into RATING (rating_id, member_id, product_id, value) values (37, 6,
14, 4);
insert into RATING (rating_id, member_id, product_id, value) values (38, 6,
15, 3);
insert into RATING (rating_id, member_id, product_id, value) values (39, 6,
20, 5);
insert into RATING (rating_id, member_id, product_id, value) values (40, 7,
3, 3);
insert into RATING (rating_id, member_id, product_id, value) values (41, 7,
4, 4);
insert into RATING (rating_id, member_id, product_id, value) values (42, 7,
6, 3);
insert into RATING (rating_id, member_id, product_id, value) values (43, 7,
16, 4);
insert into RATING (rating_id, member_id, product_id, value) values (44, 7,
17, 5);
insert into RATING (rating_id, member_id, product_id, value) values (45, 8,
1, 1);
insert into RATING (rating_id, member_id, product_id, value) values (46, 8,
2, 2);
insert into RATING (rating_id, member_id, product_id, value) values (47, 8,
4, 3);
insert into RATING (rating_id, member_id, product_id, value) values (48, 9,
1, 5);
insert into RATING (rating_id, member_id, product_id, value) values (49, 9,
12, 5);
insert into RATING (rating_id, member_id, product_id, value) values (50, 9,
15, 3);
```

```sql
insert into RATING (rating_id, member_id, product_id, value) values (51, 10,
1, 1);
insert into RATING (rating_id, member_id, product_id, value) values (52, 10,
8, 4);
insert into RATING (rating_id, member_id, product_id, value) values (53, 10,
10, 4);
insert into RATING (rating_id, member_id, product_id, value) values (54, 10,
11, 2);
insert into RATING (rating_id, member_id, product_id, value) values (55, 10,
17, 1);
insert into RATING (rating_id, member_id, product_id, value) values (56, 10,
18, 5);
```

--TABLE COMMENTS

```sql
insert into COMMENTS (comment_id, member_id, product_id, message) values (1,
1, 1, 'Very fast and good OS');
insert into COMMENTS (comment_id, member_id, product_id, message) values (2,
1, 18, 'MS SQL Server 2016 is better than MS SQL Server 2013R');
insert into COMMENTS (comment_id, member_id, product_id, message) values (3,
2, 20, 'All Oracle databases are fine');
insert into COMMENTS (comment_id, member_id, product_id, message) values (4,
3, 20, 'Oracle 12 version is stable database');
insert into COMMENTS (comment_id, member_id, product_id, message) values (5,
4, 1, 'Well.. 10 version is slower than Linux Suse');
insert into COMMENTS (comment_id, member_id, product_id, message) values (6,
4, 15, 'I use all the time AutoCAD for any engineering tasks');
insert into COMMENTS (comment_id, member_id, product_id, message) values (7,
5, 12, 'Office standard 2016 doesn''t support some files');
insert into COMMENTS (comment_id, member_id, product_id, message) values (8,
6, 14, 'One of the stable versions of MS Office');
insert into COMMENTS (comment_id, member_id, product_id, message) values (9,
7, 6, 'I had trouble with migration from 2012R to 2016');
insert into COMMENTS (comment_id, member_id, product_id, message) values (10,
8, 1, 'Good OS!');
insert into COMMENTS (comment_id, member_id, product_id, message) values (11,
9, 15, 'As usally best engineering tool');
insert into COMMENTS (comment_id, member_id, product_id, message) values (12,
10, 17, 'Stable version of 10');
insert into COMMENTS (comment_id, member_id, product_id, message) values (13,
10, 7, 'Oh best Linux ever seen');
insert into COMMENTS (comment_id, member_id, product_id, message) values (14,
5, 8, 'My lovely Debian');
```

--SQL

--pkgMember

```sql
/*
USED COLLECTIONS (Nested Table), CURSOR, FUNCTION, PACKAGE, LOOP, INNER JOIN,
SQL QUERY
FUNCTION getProductQantityByMemberId(g_member_id NUMBER) - returns table with
product name, product quantity, client name by member id
FUNCTION getProductQantityByMemberName(g_name VARCHAR) - returns table with
product name, product quantity, client name by member name
FUNCTION getProductTransactionByIdDate(g_member_id NUMBER, s_date Date,
e_date DATE) - returns client name, product name, transaction date, approval
status by client id, and between start and end dates
```

```
FUNCTION getProductTransactionByDate(s_date Date, e_date DATE) - returns
client name, prodct name, transaction date, approval status by start and end
dates
*/
--------------------------------------------------------------
--Create TYPE Object for all members
CREATE OR REPLACE TYPE ProductQantityByMember AS OBJECT (
    fullname VARCHAR(50),
    productname VARCHAR(50),
    quantity NUMBER(20)
);
-------------------------------------------------------------------------
--Create Type as TABLE from TYPE Object
CREATE OR REPLACE TYPE tableProductQantityByMember IS TABLE OF
ProductQantityByMember;
-------------------------------------------------------------------------
--Create TYPE Object for Products Transactions by ID and Date
CREATE OR REPLACE TYPE ProductTransactionsByIdDate AS OBJECT (
    fullname VARCHAR(50),
    productname VARCHAR(50),
    transaction_date DATE,
    approvalstatus VARCHAR(20)
);
-------------------------------------------------------------------------
--Create Type as TABLE from TYPE Object
CREATE OR REPLACE TYPE tableProductTransactionsByIdDate IS TABLE OF
ProductTransactionsByIdDate;
-------------------------------------------------------------------------
--Create TYPE Object for Product Transactions by Date
CREATE OR REPLACE TYPE ProductTransactionsByDate AS OBJECT (
    fullname VARCHAR(50),
    productname VARCHAR(50),
    transaction_date DATE,
    approvalstatus VARCHAR(50)
);
-------------------------------------------------------------------------
--Create Type as TABLE from TYPE Object
CREATE OR REPLACE TYPE tableProductTransactionsByDate IS TABLE OF
ProductTransactionsByDate;
-------------------------------------------------------------------------
--Create Package pkgMembers and describe functions in it
CREATE OR REPLACE PACKAGE pkgMembers AS
    FUNCTION getProductQantityByMemberId(g_member_id NUMBER) RETURN
tableProductQantityByMember;
    FUNCTION getProductQantityByMemberName(g_name VARCHAR) RETURN
tableProductQantityByMember;
    FUNCTION getProductTransactionByIdDate(g_member_id NUMBER, s_date Date,
e_date DATE) RETURN tableProductTransactionsByIdDate;
    FUNCTION getProductTransactionByDate(s_date Date, e_date DATE) RETURN
tableProductTransactionsByDate;
END pkgMembers;
-------------------------------------------------------------------------
--Create package pkgMembers NODY
CREATE OR REPLACE PACKAGE BODY pkgMembers AS

    --returns table with product name, product quantity, client name by
member id
    FUNCTION getProductQantityByMemberId(g_member_id NUMBER) RETURN
tableProductQantityByMember AS

        t tableProductQantityByMember := tableProductQantityByMember();

        fname VARCHAR(50);
        pname VARCHAR(50);
```

```sql
        q NUMBER(20);

        CURSOR cur IS SELECT m.fullname, p.productname, c.quantity FROM
member m
            INNER JOIN cart c ON m.member_id = c.member_id
            INNER JOIN product p ON c.product_id = p.product_id
            AND m.member_id = g_member_id;

        BEGIN
            OPEN cur;
                LOOP FETCH cur INTO
                    fname,
                    pname,
                    q;
                EXIT WHEN cur%NOTFOUND;
                    t.extend;
                    t(t.last) := ProductQantityByMember(fname, pname, q);
                END LOOP;
            CLOSE cur;
        RETURN t;
    END getProductQantityByMemberId;

    --returns table with product name, product quantity, client name by
member name
    FUNCTION getProductQantityByMemberName(g_name VARCHAR) RETURN
tableProductQantityByMember AS

        t tableProductQantityByMember := tableProductQantityByMember();

        fname VARCHAR(50);
        pname VARCHAR(50);
        q NUMBER(20);

        CURSOR cur IS SELECT m.fullname, p.productname, c.quantity FROM
member m
            INNER JOIN cart c ON m.member_id = c.member_id
            INNER JOIN product p ON c.product_id = p.product_id
            AND UPPER(m.fullname) LIKE '%' || UPPER(g_name) || '%';

        BEGIN
            OPEN cur;
                LOOP FETCH cur INTO
                    fname,
                    pname,
                    q;
                EXIT WHEN cur%NOTFOUND;
                    t.extend;
                    t(t.last) := ProductQantityByMember(fname, pname, q);
                END LOOP;
            CLOSE cur;
        RETURN t;
    END getProductQantityByMemberName;

    --returns client name, product name and transaction date by client id,
and between start and end dates
    FUNCTION getProductTransactionByIdDate(g_member_id NUMBER, s_date Date,
e_date DATE) RETURN tableProductTransactionsByIdDate AS

        t tableProductTransactionsByIdDate :=
tableProductTransactionsByIdDate();

        fname VARCHAR(50);
        pname VARCHAR(50);
        t_date DATE;
```

```plsql
        approvalstatus VARCHAR(20);

        CURSOR cur IS SELECT m.fullname,
                            p.productname,
                            t.transactiondate,
                            t.approvalstatus
                     FROM member m
                       INNER JOIN transactions t ON m.member_id =
t.member_id
                       INNER JOIN product p ON t.product_id = p.product_id
                       AND m.member_id = g_member_id
                       AND t.transactiondate BETWEEN s_date AND e_date;

        BEGIN
            OPEN cur;
                LOOP FETCH cur INTO
                    fname,
                    pname,
                    t_date,
                    approvalstatus;
                EXIT WHEN cur%NOTFOUND;
                    t.extend;
                    t(t.last) := ProductTransactionsByIdDate(fname, pname,
t_date, approvalstatus);
                END LOOP;
            CLOSE cur;
        RETURN t;
    END getProductTransactionByIdDate;

    --returns client name, prodct name, transaction date, approval status by
start and end dates
    FUNCTION getProductTransactionByDate(s_date Date, e_date DATE) RETURN
tableProductTransactionsByDate AS

        t tableProductTransactionsByDate := tableProductTransactionsByDate();

        fname VARCHAR(50);
        pname VARCHAR(50);
        t_date DATE;
        approvalstatus VARCHAR(20);

        CURSOR cur IS SELECT m.fullname,
                            p.productname,
                            t.transactiondate,
                            t.approvalstatus
                     FROM member m
                       INNER JOIN transactions t ON m.member_id =
t.member_id
                       INNER JOIN product p ON t.product_id = p.product_id
                       AND t.transactiondate between s_date AND e_date;

        BEGIN
            OPEN cur;
                LOOP FETCH cur INTO
                    fname,
                    pname,
                    t_date,
                    approvalstatus;
                EXIT WHEN cur%NOTFOUND;
                    t.extend;
                    t(t.last) := ProductTransactionsByDate(fname, pname,
t_date, approvalstatus);
                END LOOP;
            CLOSE cur;
```

```
        RETURN t;
    END getProductTransactionByDate;

END pkgMembers;


--------------------------------------------------------------------
--Test Functions
SELECT * FROM TABLE(pkgMembers.getProductQantityByMemberId(4));
--------------------------------------------------------------------
SELECT * FROM TABLE(pkgMembers.getProductQantityByMemberName('z'));
--------------------------------------------------------------------
SELECT * FROM TABLE(pkgMembers.getProductTransactionByIdDate(5, '01-Jan-
2018', '31-Dec-2018'));
--------------------------------------------------------------------
SELECT * FROM TABLE(pkgMembers.getProductTransactionByDate('01-Jan-2018',
'31-Jan-2018'));
--------------------------------------------------------------------

--pkgRating

/*
USED COLLECIONS (Nested table), CURSOR (RECORD), FUNCTION, PACKAGE, LOOP,
INNER JOIN, LEFT JOIN, GROUP BY, ORDER BY
FUNCTION getMaxRatingVoteCount - returns max rated products with vote count
FUNCTION getRateByClient - returns the list of cleints who voted, voted
products, rate score
*/
--------------------------------------------------------------------
--Create TYPE Object for max rating and vote count
CREATE OR REPLACE TYPE MaxRatingVoteCount AS OBJECT (
    productname VARCHAR(50),
    description VARCHAR(100),
    max_rate NUMBER(20),
    vote_count NUMBER(20)
);
--------------------------------------------------------------------
--Create Type as TABLE from TYPE Object
CREATE OR REPLACE TYPE tableMaxRatingVoteCount IS TABLE OF
MaxRatingVoteCount;
--------------------------------------------------------------------
--Create TYPE Object for client and his rate by product
CREATE OR REPLACE TYPE RateByClient AS OBJECT (
    fullname VARCHAR(50),
    productname VARCHAR(50),
    description VARCHAR(100),
    rate NUMBER(20)
);
--------------------------------------------------------------------
--Create Type as TABLE from TYPE Object
CREATE OR REPLACE TYPE tableRateByClient IS TABLE OF RateByClient;
--------------------------------------------------------------------
--Create Package pkgMembers and describe functions in it
CREATE OR REPLACE PACKAGE pkgRating AS
    FUNCTION getMaxRatingVoteCount RETURN tableMaxRatingVoteCount;
    FUNCTION getRateByClient RETURN tableRateByClient;
END pkgRating;
--------------------------------------------------------------------
--Create package pkgMembers NODY
CREATE OR REPLACE PACKAGE BODY pkgRating AS
    --get max rating and vote count by product
    FUNCTION getMaxRatingVoteCount RETURN tableMaxRatingVoteCount AS

        t tableMaxRatingVoteCount := tableMaxRatingVoteCount();
```

```sql
        pname VARCHAR(50);
        description VARCHAR(50);
        max_rate NUMBER(20);
        vote_count NUMBER(20);

        BEGIN
            FOR rec IN (SELECT p.productname,
                               rt.description,
                               MAX(r.value) AS max_rate,
                               COUNT(*) AS vote_count
                        FROM Rating r
                            LEFT JOIN Product p ON r.product_id =
p.product_id
                            LEFT JOIN Member m ON r.member_id = m.member_id
                            INNER JOIN Ratingtype rt ON r.value = rt.valueid
                            and r.value in (SELECT MAX(value) FROM Rating)
                            GROUP BY p.productname, rt.description
                            ORDER BY vote_count DESC)

        LOOP
          pname := rec.productname;
          description := rec.description;
          max_rate := rec.max_rate;
          vote_count := rec.vote_count;

            t.extend;
            t(t.last) := MaxRatingVoteCount(pname, description, max_rate,
vote_count);

        END LOOP;

        RETURN t;
    END getMaxRatingVoteCount;
    --get all rates by client
    FUNCTION getRateByClient RETURN tableRateByClient AS

        t tableRateByClient := tableRateByClient();

        fname VARCHAR(50);
        pname VARCHAR(50);
        description VARCHAR(50);
        rate NUMBER(20);

        BEGIN
            FOR rec IN (SELECT m.fullname,
                               p.productname,
                               rt.description,
                               r.value AS Rate
                        FROM Member m
        INNER JOIN Rating r ON m.member_id = r.member_id
        INNER JOIN Ratingtype rt ON r.value = rt.valueid
        INNER JOIN Product p ON r.product_id = p.product_id
        ORDER BY Rate DESC)

        LOOP
          fname := rec.fullname;
          pname := rec.productname;
          description := rec.description;
          rate := rec.Rate;

            t.extend;
            t(t.last) := RateByClient(fname, pname, description, rate);

        END LOOP;
```

```
        RETURN t;
    END getRateByClient;

END pkgRating;
-------------------------------------------------------------------------
--Test Functions
-------------------------------------------------------------------------
SELECT * FROM TABLE(pkgRating.getMaxRatingVoteCount());
-------------------------------------------------------------------------
SELECT * FROM TABLE(pkgRating.getRateByClient());
-------------------------------------------------------------------------
--pkgProduct
/*
USED COLLECIONS (Nested table), CURSOR (RECORD), FUNCTION, PACKAGE, LOOP,
INNER JOIN, GROUP BY, ORDER BY, Aggregate Functions (MAX, COUNT, AVG)
FUNCTION getSelledProducts RETURN tableSelledProducts - returns all selled
products
FUNCTION getProductAvgRate RETURN tableProductAvgRate - returns products with
average rate
FUNCTION getCommentByClient RETURN tableCommentByClient - returns comments of
clients on products
*/
-------------------------------------------------------------------------
--Create TYPE Object for max rating and vote count
CREATE OR REPLACE TYPE SelledProducts AS OBJECT (
    productname VARCHAR(50),
    selled_count NUMBER(20),
    price NUMBER(20),
    total_sum NUMBER(20)
);


-------------------------------------------------------------------------
--Create Type as TABLE from TYPE Object
CREATE OR REPLACE TYPE tableSelledProducts IS TABLE OF SelledProducts;
-------------------------------------------------------------------------
--Create TYPE Object for max rating and vote count
CREATE OR REPLACE TYPE ProductAvgRate AS OBJECT (
    productname VARCHAR(50),
    avg_rate NUMBER(20)
);
-------------------------------------------------------------------------
--Create Type as TABLE from TYPE Object
CREATE OR REPLACE TYPE tableProductAvgRate IS TABLE OF ProductAvgRate;
-------------------------------------------------------------------------
--Create TYPE Object for max rating and vote count
CREATE OR REPLACE TYPE CommentByClient AS OBJECT (
    fullname VARCHAR(50),
    productname VARCHAR(50),
    message VARCHAR(500)
);
-------------------------------------------------------------------------
--Create Type as TABLE from TYPE Object
CREATE OR REPLACE TYPE tableCommentByClient IS TABLE OF CommentByClient;
-------------------------------------------------------------------------
--Create Package pkgMembers and describe functions in it
CREATE OR REPLACE PACKAGE pkgProduct AS
    FUNCTION getSelledProducts RETURN tableSelledProducts;
    FUNCTION getProductAvgRate RETURN tableProductAvgRate;
    FUNCTION getCommentByClient RETURN tableCommentByClient;
END pkgProduct;
-------------------------------------------------------------------
--Create package pkgMembers NODY
CREATE OR REPLACE PACKAGE BODY pkgProduct AS
```

```plsql
    --get selled products list
    FUNCTION getSelledProducts RETURN tableSelledProducts AS

        t tableSelledProducts := tableSelledProducts();

        BEGIN
            FOR rec IN (SELECT p.productname,
                               COUNT(c.quantity) AS selled_count,
                               p.price,
                               SUM(p.price) AS total_sum
                        FROM Product p
                               INNER JOIN Cart c ON p.product_id =
c.product_id
                               GROUP BY p.productname, p.price
                               ORDER BY total_sum DESC)

        LOOP

            t.extend;
            t(t.last) := SelledProducts(rec.productname, rec.selled_count,
rec.price, rec.total_sum);

        END LOOP;

        RETURN t;
    END getSelledProducts;

    --get average rate per product
    FUNCTION getProductAvgRate RETURN tableProductAvgRate AS

        t tableProductAvgRate := tableProductAvgRate();

        BEGIN
            FOR rec IN (SELECT p.productname,
                               ROUND(AVG(r.value), 0) AS Average_rate
                        FROM Product p
                               INNER JOIN Rating r ON p.product_id =
r.product_id
                               GROUP BY p.productname
                               ORDER BY Average_rate DESC)

        LOOP

            t.extend;
            t(t.last) := ProductAvgRate(rec.productname, rec.Average_rate);

        END LOOP;

        RETURN t;
    END getProductAvgRate;

    --get client comments on products
    FUNCTION getCommentByClient RETURN tableCommentByClient AS

        t tableCommentByClient := tableCommentByClient();

        BEGIN
            FOR rec IN (SELECT m.fullname,
                               p.productname,
                               cm.message
                        FROM Product p
                               INNER JOIN Comments cm ON p.product_id =
cm.product_id
```

```
                                  INNER JOIN Member m ON cm.member_id =
m.member_id
                                  ORDER BY m.fullname)
        LOOP

            t.extend;
            t(t.last) := CommentByClient(rec.fullname, rec.productname,
rec.message);

        END LOOP;

            RETURN t;
    END getCommentByClient;

END pkgProduct;
------------------------------------------------------------------
--Test Functions
------------------------------------------------------------------
SELECT * FROM TABLE(pkgProduct.getSelledProducts());
------------------------------------------------------------------
SELECT * FROM TABLE(pkgProduct.getProductAvgRate());
------------------------------------------------------------------
SELECT * FROM TABLE(pkgProduct.getCommentByClient());
------------------------------------------------------------------


--pkgDynamicSQL
/*
USED FUNCTION, PROCEDURE, PACKAGE, INNER JOIN, DYNAMIC SQL, TRANSACTION,
GROUP BY, ORDER BY
--FUNCTION getClientMaxBuyProduct – returns maximum bought product my client
using client id
--InsertMember - procedure inserts into table Member new client
--InsertTransactions - procedure inserts into table Transactions new
transaction and checks Cart table,
if there is no such client and status APPROVED, creates new one, if exists
then update quantity of cart with new quantiny
--InsertProduct - procedure inserts new product to the table Product
--InsertRating - procedure inserts to the table Rating new rating
--InsertComments - procedure inserts new comment to the Comments table
*/
----------------------------------------------------------------------------

CREATE OR REPLACE PACKAGE pkgDynamicSQL AS
    FUNCTION getClientMaxBuyProduct(g_member_id NUMBER) RETURN VARCHAR;

    PROCEDURE InsertMember( username VARCHAR,
                            password VARCHAR,
                            email VARCHAR,
                            fullname VARCHAR,
                            address VARCHAR,
                            phone VARCHAR,
                            gender VARCHAR,
                            birth_date DATE);

    PROCEDURE InsertTransactions(mem_id NUMBER,
                            prod_id NUMBER,
                            quan NUMBER,
                            approvalstatus VARCHAR,
                            transactiondate DATE);

    PROCEDURE InsertProduct(productname VARCHAR,
                            producttype NUMBER,
                            description VARCHAR,
```

```sql
                                    stock NUMBER,
                                    price NUMBER,
                                    imagesource VARCHAR);

        PROCEDURE InsertRating(member_id NUMBER, product_id NUMBER, value
    NUMBER);

        PROCEDURE InsertComments(member_id NUMBER, product_id NUMBER, message
    VARCHAR2);

    END pkgDynamicSQL;
    --------------------------------------------------------------------------------

    CREATE OR REPLACE PACKAGE BODY pkgDynamicSQL AS
        FUNCTION getClientMaxBuyProduct(g_member_id NUMBER) RETURN VARCHAR IS

        pname VARCHAR(50);
        dynamicsql VARCHAR2(500);

        BEGIN

            dynamicsql := 'SELECT productname FROM(SELECT p.productname FROM cart
    c
                INNER JOIN Member m ON c.member_id = m.member_id
                INNER JOIN Product p ON c.product_id = p.product_id
                AND c.quantity = (SELECT MAX(quantity) FROM cart WHERE member_id
    =  :member_id)
                AND m.member_id = :member_id
                GROUP BY p.productname, c.quantity)
                WHERE ROWNUM = 1';
                EXECUTE IMMEDIATE dynamicsql INTO pname USING g_member_id,
    g_member_id;
        RETURN pname;
        END;

        PROCEDURE InsertMember(username VARCHAR,
                                password VARCHAR,
                                email VARCHAR,
                                fullname VARCHAR,
                                address VARCHAR,
                                phone VARCHAR,
                                gender VARCHAR,
                                birth_date DATE)
        AS

        dynamicsql VARCHAR2(500);
        mem_id NUMBER(20) := 0;

        BEGIN
            SAVEPOINT before_insert_data1;

            SELECT MAX(member_id) INTO mem_id FROM Member;

            mem_id := mem_id + 1;

            dynamicsql := 'INSERT INTO Member
                                VALUES (:mem_id,
                                        :username,
                                        :password,
                                        :email,
                                        :fullname,
                                        :address,
                                        :phone,
                                        :gender,
```

```sql
                                        :birth_date)';
        --Execute Dynamic SQL
        EXECUTE IMMEDIATE dynamicsql USING mem_id, username, password, email,
fullname, address, phone, gender, birth_date;

        EXCEPTION
         WHEN OTHERS THEN
            -- Rollback everything which was made after `SAVEPOINT
before_insert_data`
        ROLLBACK TO before_insert_data1;
        RAISE;
    END InsertMember;

    PROCEDURE InsertTransactions(mem_id NUMBER,
                                prod_id NUMBER,
                                quan NUMBER,
                                approvalstatus VARCHAR,
                                transactiondate DATE)
    AS

    last_tran_id NUMBER(20) := 0;

    c_id NUMBER(20) := 0;

    BEGIN

        SELECT MAX(transaction_id) INTO last_tran_id FROM Transactions;

        last_tran_id := last_tran_id + 1;

        INSERT INTO Transactions VALUES (last_tran_id, mem_id, prod_id, quan,
approvalstatus, transactiondate);
        SELECT Cart_id INTO c_id FROM Cart WHERE product_id = prod_id AND
member_id = mem_id;

        IF approvalstatus = 'APPROVED' THEN
            UPDATE Cart SET quantity = quantity + quan WHERE Cart_id = c_id;
        END IF;

        EXCEPTION
            WHEN NO_DATA_FOUND THEN
            IF approvalstatus = 'APPROVED' THEN

                SELECT MAX(cart_id) INTO c_id FROM Cart;
                c_id := c_id + 1;
                INSERT INTO Cart VALUES (c_id, mem_id, prod_id, 0);

                UPDATE Cart SET quantity = quan WHERE member_id = mem_id AND
product_id = prod_id;
            END IF;

    END InsertTransactions;

    PROCEDURE InsertProduct(productname VARCHAR,
                            producttype NUMBER,
                            description VARCHAR,
                            stock NUMBER,
                            price NUMBER,
                            imagesource VARCHAR)
    AS

    prod_id NUMBER(10) := 0;

    BEGIN
```

```
            SAVEPOINT before_insert_data2;

            SELECT MAX(product_id) INTO prod_id FROM Product;

            prod_id := prod_id + 1;

            INSERT INTO Product VALUES(prod_id, productname, producttype,
description, stock, price, imagesource);

            EXCEPTION
             WHEN OTHERS THEN
                -- Rollback everything which was made after `SAVEPOINT
before_insert_data`
            ROLLBACK TO before_insert_data2;
            RAISE;
        END InsertProduct;

    PROCEDURE InsertRating(member_id NUMBER, product_id NUMBER, value NUMBER)
    AS

    rate_id NUMBER(10) := 0;

    BEGIN
        SAVEPOINT before_insert_data3;

        SELECT MAX(rating_id) INTO rate_id FROM Rating;

        rate_id := rate_id + 1;

        INSERT INTO Rating VALUES(rate_id, member_id, product_id, value);

        EXCEPTION
         WHEN OTHERS THEN
            -- Rollback everything which was made after `SAVEPOINT
before_insert_data`
        ROLLBACK TO before_insert_data3;
        RAISE;
    END InsertRating;

    PROCEDURE InsertComments(member_id NUMBER, product_id NUMBER, message
VARCHAR2)
    AS

    comm_id NUMBER(10) := 0;

    BEGIN
        SAVEPOINT before_insert_data4;

        SELECT MAX(comment_id) INTO comm_id FROM Comments;

        comm_id := comm_id + 1;

        INSERT INTO Comments VALUES(comm_id, member_id, product_id, message);

        EXCEPTION
         WHEN OTHERS THEN
            -- Rollback everything which was made after `SAVEPOINT
before_insert_data`
        ROLLBACK TO before_insert_data4;
        RAISE;
    END InsertComments;

END pkgDynamicSQL;
--------------------------------------------------------------------------
```

```sql
--test Dynamic SQL getClientMaxBuyProduct
declare
a varchar(50);
begin
    a := pkgDynamicSQL.getClientMaxBuyProduct(5);
    dbms_output.put_line(a);
end;
------------------------------------------------------------------------

BEGIN
  --test Dynamic SQL insert into Member
    --pkgdynamicsql.InsertMember('liquid1983', 'pwd123', 'abc@gmail.com',
'Yessey Maratov', 'Abay 190 apt 5', '87007004433', 'M', '08-10-1983');
------------------------------------------------------------------------
    --pkgdynamicsql.InsertTransactions(11, 19, 4, 'APPROVED', sysdate);
    --pkgdynamicsql.insertproduct('Windows XP Pro', 1, 'Home Desktop', 20,
7000, 'https://docs.oracle.com/cd/B10501_01/appdev.920/a96624/07_errs.htm');
    --pkgdynamicsql.InsertRating(10, 10, 5);
    --pkgdynamicsql.insertcomments(10, 10, 'test message');
END;
------------------------------------------------------------------------

select * from member where member_id = 11;
SELECT * FROM Transactions where member_id = 11;
select * from cart where member_id = 11
select * from rating where rating_id = 57;
select * from comments where comment_id = 15;
------------------------------------------------------------------------

delete from transactions where member_id = 11;
delete from cart where member_id=11;
delete from member where member_id = 11;
delete from product where product_id = 21;
delete from rating where rating_id=57
delete from comments where comment_id=15
------------------------------------------------------------------------

                              --TRIGGER

--Check inserting new quantity to the Transaction by product,
--if it is higher than quantity from product, then reject Insert into
Transactions
CREATE OR REPLACE TRIGGER CompareProductStockNewStock
    BEFORE INSERT OR UPDATE ON Transactions FOR EACH ROW

    DECLARE

    p_stock NUMBER(20);

BEGIN

    SELECT Stock INTO p_stock FROM Product WHERE product_id = :NEW.product_id;

    IF :NEW.Quantity > p_stock THEN
        raise_application_error(-20900,'You can not buy more pieces than
available in the stock');
        DBMS_OUTPUT.put_line ('You can not buy more pieces than available in
the stock');
    END IF;
END CompareProductStockNewStock;

------------------------------------------------------------------------------------

CREATE TABLE Product_log (
```

```sql
       id NUMBER(20) GENERATED BY DEFAULT ON NULL AS IDENTITY,
       product_id NUMBER(20),
       username VARCHAR(50),
       change_date DATE,
       old_price NUMBER
       );
```

```sql
CREATE OR REPLACE TRIGGER Product_before_update_trigger
BEFORE UPDATE
   ON Product FOR EACH ROW
  DECLARE
  updated_user varchar2(20);
BEGIN
   SELECT user INTO updated_user
   FROM dual;
   INSERT INTO Product_log (product_id, username, Change_Date, Old_Price)
VALUES(
   :OLD.PRODUCT_ID,
   updated_user,
   SYSDATE,
   :OLD.PRICE);
END;
```

```sql
--Test trigger

update product set price = 14000 where product_id = 1

select * from product where product_id = 1

select * from product_log
```

<div align="center">--CREATE INDEX ON TRANSACTIONS TABLE</div>

```sql
--CREATE INDEX ON TABLE TRANSACTIONS (member_id)
CREATE INDEX tran_member_id_index
  ON TRANSACTIONS(member_id);


--CREATE INDEX ON TABLE TRANSACTIONS (product_id)
CREATE INDEX tran_product_id_index
  ON TRANSACTIONS(product_id);

--CREATE INDEX ON TABLE TRANSACTIONS (transactiondate)
CREATE INDEX tran_transactiondate_index
  ON TRANSACTIONS(transactiondate);
```