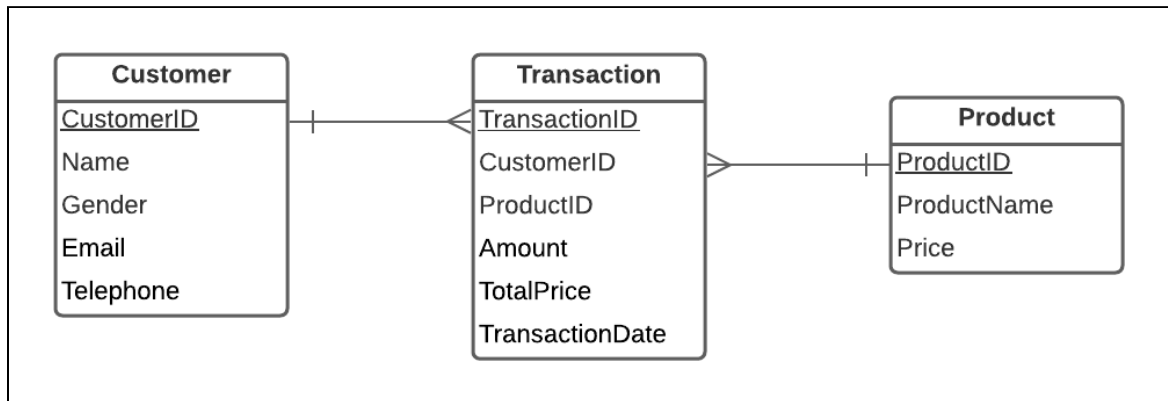## 1. ERD

2. Get best seller product for male and female

```
WITH X AS
      SELECT ProductID, SUM(Amount) AS TotalAmount FROM
      (SELECT * FROM TRANSACTION WHERE CustomerID IN
            {SELECT CustomerID FROM Customer WHERE Gender = "FEMALE"))
      AS FemaleTransaction GROUP BY ProductID,
WITH Y AS
      SELECT ProductID, SUM(Amount) AS TotalAmount FROM
      (SELECT * FROM TRANSACTION WHERE CustomerID IN
            {SELECT CustomerID FROM Customer WHERE Gender = "MALE"))
      AS MaleTransaction GROUP BY ProductID
SELECT ProductID, ProductName, TotalAmount FROM Y NATURAL JOIN Product ON
ProductID LIMIT 1
UNION
SELECT ProductID, ProductName, TotalAmount FROM X NATURAL JOIN Product
ON ProductID LIMIT 1;
```

3. Get the customer that spends the most money.

```
WITH X AS
      (SELECT CustomerID, SUM(TotalPrice) FROM Transaction GROUP BY
CustomerID ORDER BY CustomerID)
SELECT Name FROM X LIMIT 1;
```

4. Show number of transactions for every 2 hours.

```
SELECT COUNT(TransactionID)
FROM Transaction
WHERE TransactionDate > DATEADD(HOUR, -2, GETDATE())
```