

# IMPLEMENTATION QUERIES

## CREATE MONTHLY BILL OF CHARGE, DATE, AND TYPE

```
INSERT INTO monthlybill (memberid, billdate, itemtype, charge)
SELECT
  c.memberid,
  c.transactiondate AS billdate,
  CASE
    WHEN c.foodid IS NOT NULL THEN f.type
    WHEN c.drinkid IS NOT NULL THEN d.type
    ELSE 'Unknown'
  END AS itemtype,
  CASE
    WHEN c.foodid IS NOT NULL THEN REPLACE(f.price, '$', '')::NUMERIC
    WHEN c.drinkid IS NOT NULL THEN REPLACE(d.price, '$', '')::NUMERIC
    ELSE 0
  END AS charge
FROM
  card c
LEFT JOIN food f ON c.foodid = f.foodid
LEFT JOIN drink d ON c.drinkid = d.drinkid
WHERE
  c.memberid = 13;
```

## See an individual members purchases and the name of the food or drink and quantity

```
SELECT
  c.memberid,
  c.transactiondate,
  COALESCE(f.name, d.type) AS item,
  CASE
    WHEN c.foodid IS NOT NULL THEN c.foodquantity
    WHEN c.drinkid IS NOT NULL THEN c.drinkquantity
  END AS quantity
FROM
  card c
LEFT JOIN food f ON c.foodid = f.foodid
LEFT JOIN drink d ON c.drinkid = d.drinkid
ORDER BY c.memberid, c.transactiondate;
```

## Rank frequency of purchases of food and drink

```
SELECT
  item,
  COUNT(*) as frequency
FROM (
  SELECT f.name as item FROM card c JOIN food f ON c.foodid = f.foodid
  UNION ALL
  SELECT d.type as item FROM card c JOIN drink d ON c.drinkid = d.drinkid
```

```
) AS purchases  
GROUP BY item  
ORDER BY frequency DESC;
```