```
# Members and Memberships → table m
Drop Table if exists m;
Create Table m as
select    a.Member_Number,    ms.Membership_Type,    a.Member_suffix,    ms.Year_Joined,
b.holder_First_Name,b.holder_Last_Name,b.holder_Gender,b.holder_BirthDate
from (select Member_Number, max(Member_suffix) as Member_suffix from members group
by Member_Number) as a
join    (select    Member_Number,    First_Name    as    holder_First_Name,Last_Name    as
holder_Last_Name,Gender as holder_Gender,BirthDate as holder_Birthdate from members
where Relationship_to_Member ="Member") as b
on a.Member_Number=b.Member_Number
join memberships as ms
on a.Member_Number=ms.Member_Number
order by Member_Number;


#Dining
select distinct service
from dining;
Drop Table if exists dining_total;
Create Table dining_total as
select
m.Member_Number,Lunch_Total,Dinner_Weekday_Total,Dinner_Weekend_Total,Brunch_Tot
al,Dining_Special_Total
from m
left join
(select Member_Number,sum(Total) as Lunch_Total
from dining
where Service="Lunch"
group by Member_Number) as l
using(Member_Number)
left join
(select Member_Number,sum(Total) as Dinner_Weekday_Total
from dining
where Service="Dinner_Weekday"
group by Member_Number) as dday
using(Member_Number)
left join
(select Member_Number,sum(Total) as Dinner_Weekend_Total
from dining
where Service="Dinner_Weekend"
group by Member_Number) as dend
using(Member_Number)
left join
```

```sql
(select Member_Number,sum(Total) as Brunch_Total
from dining
where Service="Brunch_Weekend"
group by Member_Number)    as bch
using(Member_Number)
left join
(select Member_Number,sum(Total) as Dining_Special_Total
from dining
where Service="Special"
group by Member_Number) as s
using(Member_Number);

UPDATE dining_total
    SET Lunch_Total=0
    where Lunch_Total is NULL;
UPDATE dining_total
    SET Dinner_Weekday_Total=0
    where Dinner_Weekday_Total is NULL;
UPDATE dining_total
    SET Dinner_Weekend_Total=0
    where Dinner_Weekend_Total is NULL;
UPDATE dining_total
    SET Dining_Special_Total=0
    where Dining_Special_Total is NULL;
UPDATE dining_total
    SET Brunch_Total=0
    where Brunch_Total is NULL;

ALTER TABLE dining_total
    ADD COLUMN Dining_Total Decimal(9,2) after Dining_Special_Total;
UPDATE dining_Total
    SET
Dining_Total=Lunch_Total+Dinner_Weekday_Total+Dinner_Weekend_Total+Brunch_Total+
Dining_Special_Total;


#Join tables (Dining, Golf, Pool, Tennis, Other) to generate a table (consum) containing all
transaction data
Drop Table if exists consum;
Create Table consum as
select * from
dining_total
left join
(select Member_Number,sum(Amount) as Golf_Total
```

```
from golf
group by Member_Number) as golf_total
using(Member_Number)
left join
(select Member_Number,sum(Amount) as Pool_Total
from pool
group by Member_Number) as pool_total
using(Member_Number)
left join
(select Member_Number,sum(Amount) as Tennis_Total
from tennis
group by Member_Number)as tennis_total
using(Member_Number)
left join
(select Member_Number,sum(Amount) as Other_Total
from other
group by Member_Number) as other_total
using(Member_Number);
select * from consum;
```

#Join tables (Promo One, Promo Two, special) to generate a table (*promo_specialinfo*) containing all promotion data and special function info

```
Drop Table if exists promo_one;
Create Table promo_one as
select m.Member_Number,
Case when promoone.Member_Number is NULL Then 0
        Else 1 End as promoone
from m
left join
promoone
on m.Member_Number=promoone.Member_Number;

Drop Table if exists promo_two;
Create Table promo_two as
select m.Member_Number,
Case when promotwo.Member_Number is NULL Then 0
        Else 1 End as promotwo
from m
left join
promotwo
on m.Member_Number=promotwo.Member_Number;

Drop Table if exists promo_specialinfo;
```

```
Create Table promo_specialinfo as
select * from promo_one
join promo_two
using(Member_Number)
left join special
using(Member_Number);


#Aggregation
Drop Table if exists agg;
Create Table agg as
select * from
m
join
consum
using(Member_Number)
join
promo_specialinfo
using(Member_Number)
order by Member_Number;

#Update and manipulate aggregated data
UPDATE agg
     SET Golf_Total=0
     where Golf_Total is NULL;
UPDATE agg
     SET Pool_Total=0
     where Pool_Total is NULL;
UPDATE agg
     SET Tennis_Total=0
     where Tennis_Total is NULL;
UPDATE agg
     SET Other_Total=0
     where Other_Total is NULL;

ALTER TABLE agg
ADD COLUMN Total Decimal(9,2) after Other_Total,
ADD COLUMN Total_Per_Person Decimal(9,2) after Total ;
UPDATE agg
SET Total=Dining_Total+Golf_Total+Pool_Total+Tennis_Total+Other_Total,

Total_Per_Person=round((Dining_Total+Golf_Total+Pool_Total+Tennis_Total+Other_Total)/
Member_suffix,2);
```

```
select * from agg;


#Analyze by SQL queries
Select
sum(Dining_Total),sum(Golf_Total),sum(Pool_Total),sum(Tennis_Total),sum(Other_Total)
from agg;

select
sum(Brunch_Total),sum(Lunch_Total),sum(Dinner_Weekday_Total),sum(Dinner_Weekend_Tot
al),sum(Dining_Special_Total)
from agg;

select Membership_Type,avg(Total),avg(Total_Per_Person)
from agg
group by Membership_Type;

select
Membership_Type,sum(Dining_Total),sum(Golf_Total),sum(Pool_Total),sum(Tennis_Total),su
m(Other_Total)
from agg
group by Membership_Type;

select
Membership_Type,promoone,sum(Dining_Total),sum(Golf_Total),sum(Pool_Total),sum(Tenni
s_Total),sum(Other_Total)
from agg
group by Membership_Type,promoone;

select
Membership_Type,promotwo,sum(Dining_Total),sum(Golf_Total),sum(Pool_Total),sum(Tenni
s_Total),sum(Other_Total)
from agg
group by Membership_Type,promotwo;
```