1. member ===> member\_id

title ===>title\_id

title\_copy ===> copy\_id+title\_id

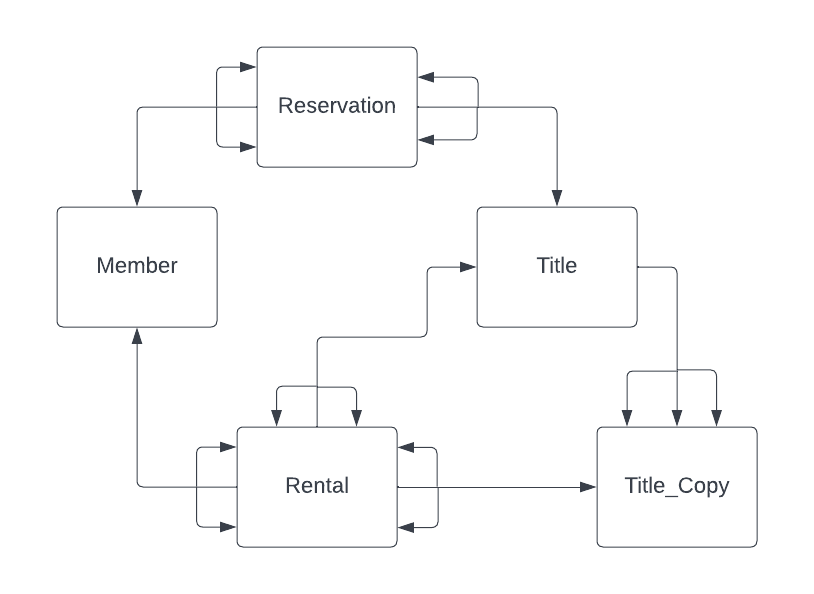
rental===> book\_date+copy\_id+title\_id

reservation ===> res\_date+member\_id+title\_id

2.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Member | Title | Title\_Copy | Rental | Reservation |
| Pk member\_id | Pk title\_id | Pk copy\_id | Pk book\_date | Pk res\_date |
|  |  | Pk fk title\_id | Pk fk copy\_id | Pk fk member\_id |
|  |  |  | Pk fk title\_id | Pk fk title\_id |

3.



4.

select \* from title

inner join rental using (title\_id)

group by category

having count(\*)= (select max(count(category)) from rental

inner join title using (title\_id)

group by category)

select \* from title a

inner join (select category from rental

inner join title using (title\_id)

group by category

having count(\*)==max(count(category))) maxCat

on a.category=maxCat.category

5.

select title from title t join(select title\_id,copy\_id from title\_copy

minus

select title\_id,copy\_id from rentals r

right join title\_copy t on r.title\_id=t.tile\_id

where exp\_ret\_date is null) sq on t.title=sq\_title

6.

SELECT T.TITLE, C.COPY\_ID, C.STATUS,

(CASE

WHEN ACT\_RET\_DATE IS NULL THEN ‘NOT AVAILABLE’

ELSE ‘AVAILABLE’

END AS STATUS\_CORECT)

FROM TITLE T

INNER JOIN TITLE\_COPY C ON T.TITLE\_ID=C.TITLE\_ID

LEFT JOIN RENTAL R ON R.TITLU\_ID=T.TITLU\_ID

7.

A. SELECT COUNT(\*)

FROM (SELECT T.TITLE,C.COPY\_ID,STATUS,

(CASE

WHEN ACT\_RET\_DATE IS NULL THEN ‘NOT AVAILABLE’

ELSE ‘AVAILABLE’

END AS STATUS\_CORECT)

FROM TITLE T,TITLE\_COPY C WHERE T.TILE\_ID=C.TITLE\_ID

WHERE STATUS!=STATUS\_CORECT

B. CREATE TABLE TITLE\_COPY\_\*\*\* AS SELECT \* FROM TITLE\_COPY;

UPDATE TITLE\_COPY\_\*\*\* SET STATUS= (CASE

WHEN ACT\_RET\_DATE IS NULL THEN ‘NOT AVAILABLE’

ELSE ‘AVAILABLE’

END AS STATUS\_CORECT)

8. SELECT

CASE

WHEN (SELECT COUNT(\*) FROM RENTAL R

JOIN RESERVATION RES ON (R.MEMBER\_ID=RES.MEMBER\_ID AND R.TILE\_ID=RES.TITLE\_ID)

WHERE BOOK\_DATE!=RES\_DATE)>0

THEN ‘NU’

ELSE ‘DA’

END;

FROM DUAL

9. SELECT M.LAST\_NAME,M.FIRST\_NAME,T.TITLU,COUNT(T.TITLE\_ID)

FROM MEMBER M

INNER JOIN RENTAL R ON (M.MEMBER\_ID=R.MEMBER\_ID)

INNER JOIN TITLE\_COPY C ON (R.COPY\_ID=C.COPY\_ID AND C.TILE\_ID=R.TITLE\_ID)

INNER JOIN TITLE T ON (T.TITLE\_ID=C.TITLE\_ID)

GROUP BY T.TITLE\_ID,T.TITLE,M.LAST\_NAME,M.FIRST\_NAME

10. select las\_name, first\_name, copy\_id, cout(copy\_id)

from membru m

inner join rental t on m.member\_id= t.member\_id

right join title\_copy tc on t.copy\_id=tc.copy\_id

group by last\_name,first\_name,copy\_id

11. SELECT TITLE,C.STATUS

FROM TITLE\_COPY C

INNER JOIN TITLE T ON (T.TILE\_ID=C.TITLE\_ID)

WHERE C,COPY\_ID=(SELECT COPY\_ID

FROM RENTAL R

INNER JOIN TITLE\_COPY C ON (R.COPY\_ID=C.COPY\_ID)

GROUP BY C.COPY\_ID

ORDER BY COUNT(C.COPY\_ID)DESC)

WHEN ROWNUM=1)