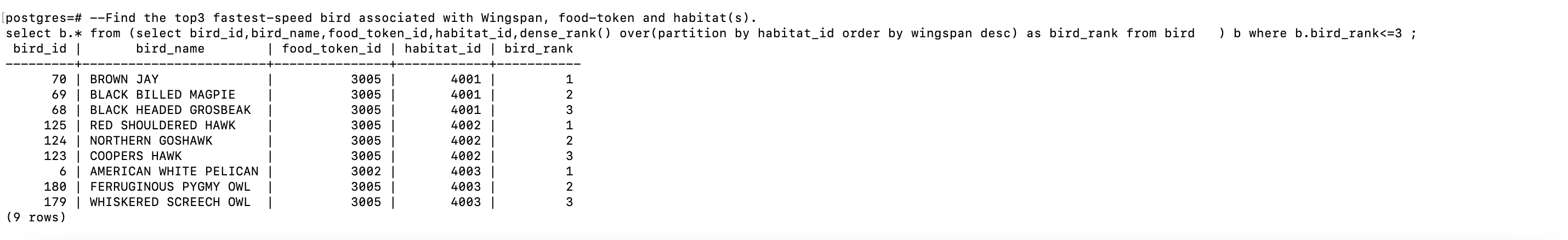
3.A.--Find the top3 fastest-speed bird associated with Wingspan, food-token and habitat(s).



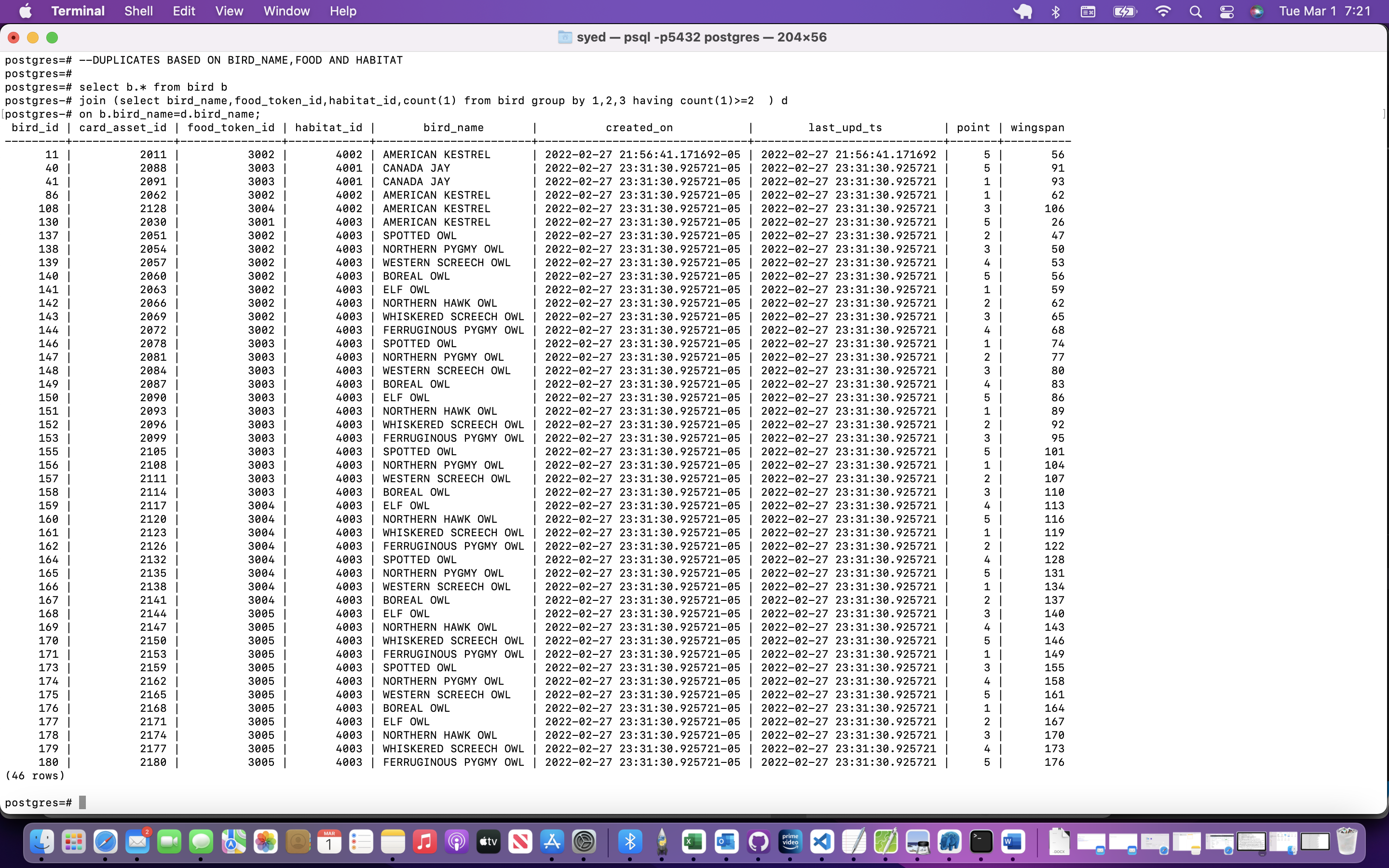
3.B

--DUPLICATES BASED ON BIRD\_NAME,FOOD AND HABITAT

select b.\* from bird b

join (select bird\_name,food\_token\_id,habitat\_id,count(1) from bird group by 1,2,3 having count(1)>=2 ) d

on b.bird\_name=d.bird\_name;



3.C

---TOTAL\_POINT AND CREDIT AFTER THE GAME CONSIDERING ALL PLAYER PLAYED TILL END

SELECT AR.GAME\_ID,AR.USER\_ID,SUM(AR.LAST\_POINTS) AS TOTAL\_POINTS,DENSE\_RANK() OVER (ORDER BY SUM(AR.LAST\_POINTS) DESC ) AS CREDIT\_RANK

FROM

( --SUM OF POINTS AFTER EACH ROUND

SELECT G.GAME\_ID,G.ROUND,G.USER\_ID,SUM(B.POINT) AS LAST\_POINTS

FROM (SELECT GAME\_ID,ROUND,USER\_ID,UNNEST(CARD\_IN\_HAND) AS CARD\_ASSET\_ID

FROM GAME WHERE GAME\_ID IN (

--CONSIDERING THE LATEST COMPLETED GAME

SELECT MAX(GAME\_ID) FROM GAME WHERE IS\_COMPLETED=TRUE

) ) G

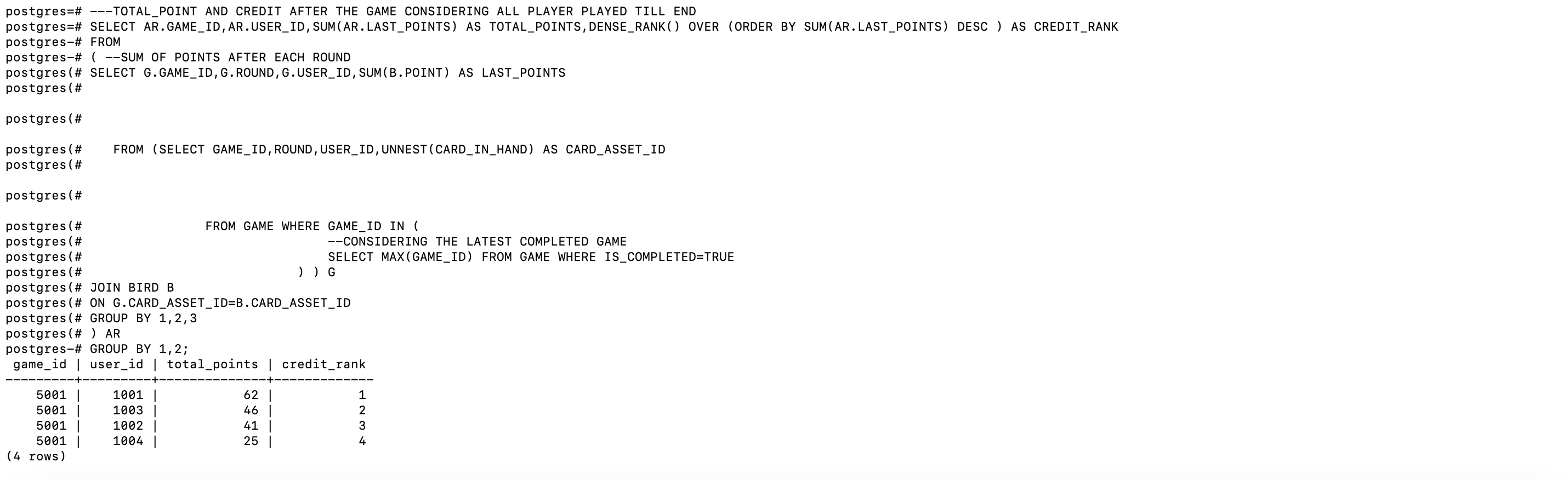
JOIN BIRD B

ON G.CARD\_ASSET\_ID=B.CARD\_ASSET\_ID

GROUP BY 1,2,3

) AR

GROUP BY 1,2;



2.E

-----INSERT THE TABLE AFTER THE GAME END

INSERT INTO USERS(USER\_ID,USER\_NAME,GAME\_ID,LAST\_POINTS,TOTAL\_POINTS,CREDIT,LAST\_LOGIN\_TS)

-----TOTAL\_POINT AND CREDIT AFTER THE EACH GAME WITH AUTO SUM OF ALL PLAYER

SELECT AF.USER\_ID,U.USER\_NAME,AF.GAME\_ID,

AF.TOTAL\_POINTS AS LAST\_POINTS,

U.PREVIOUS\_POINT+AF.TOTAL\_POINTS AS TOTAL\_POINTS,--AUTO SUM OF ALL PLAYER

DENSE\_RANK() OVER (ORDER BY (U.PREVIOUS\_POINT+AF.TOTAL\_POINTS) DESC ) AS CREDIT,CURRENT\_TIMESTAMP

FROM

(---TOTAL\_POINT AND CREDIT AFTER THE EACH GAME CONSIDERING ALL PLAYER PLAYED TILL END

SELECT AR.GAME\_ID,AR.USER\_ID,SUM(AR.LAST\_POINTS) AS TOTAL\_POINTS,DENSE\_RANK() OVER (ORDER BY SUM(AR.LAST\_POINTS) DESC ) AS CREDIT\_RANK

FROM

( --SUM OF POINTS AFTER EACH ROUND

SELECT G.GAME\_ID,G.ROUND,G.USER\_ID,SUM(B.POINT) AS LAST\_POINTS

FROM (SELECT GAME\_ID,ROUND,USER\_ID,UNNEST(CARD\_IN\_HAND) AS CARD\_ASSET\_ID --STORED AS AN ARRAY TO REDUCE REDUNDENCY

FROM GAME WHERE GAME\_ID IN (

--CONSIDERING THE LATEST COMPLETED GAME

SELECT MAX(GAME\_ID) FROM GAME WHERE IS\_COMPLETED=TRUE

) ) G

JOIN BIRD B

ON G.CARD\_ASSET\_ID=B.CARD\_ASSET\_ID

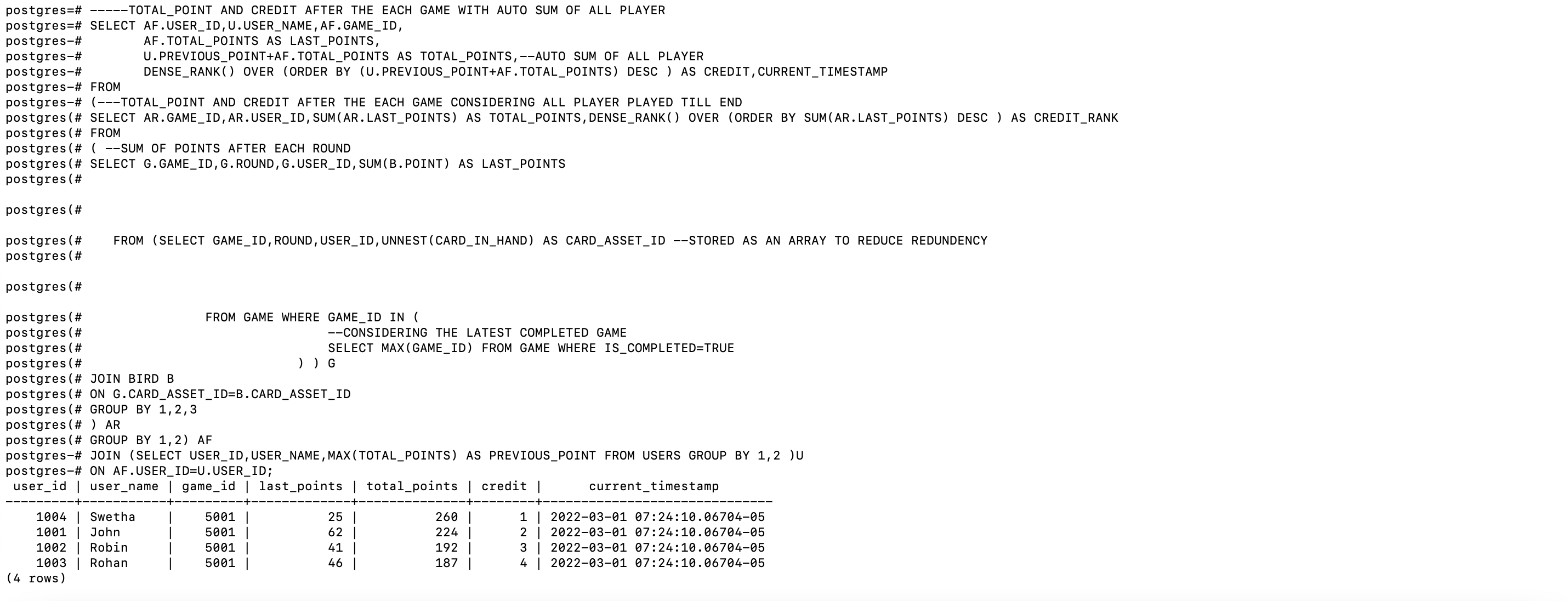
GROUP BY 1,2,3

) AR

GROUP BY 1,2) AF

JOIN (SELECT USER\_ID,USER\_NAME,MAX(TOTAL\_POINTS) AS PREVIOUS\_POINT FROM USERS GROUP BY 1,2 )U

ON AF.USER\_ID=U.USER\_ID;



---VIEW CREATED FOR FETCHING THE LATEST STATUS

CREATE VIEW USERS\_STATUS AS

SELECT A.\* FROM USERS A

JOIN (SELECT USER\_ID,MAX(GAME\_ID) AS GAME\_ID FROM USERS GROUP BY 1) B

ON A.USER\_ID=B.USER\_ID

AND A.GAME\_ID=B.GAME\_ID

ORDER BY A.CREDIT;

---SELECT VIEW FOR LATEST CREDIT

SELECT \* FROM USERS\_STATUS;

