1.Get the ids of games that can be played on every platform.

SELECT G.GAME\_ID

FROM XGAMES G

WHERE NOT EXISTS

(SELECT P.\*

FROM XPLATFORMS P

WHERE NOT EXISTS

(SELECT PL.\*

FROM XPLAYS PL

WHERE G.GAME\_ID = PL.GAME\_ID

AND PL.PLATFORM\_ID = P.PLATFORM\_ID));



Cardinality: 4

2.Get the ids of developers that only develop 'Action-Adventure' games.

SELECT D.DEVELOPER\_ID

FROM XDEVELOPERS D

WHERE D.DEVELOPER\_ID NOT IN

(SELECT DV.DEVELOPER\_ID

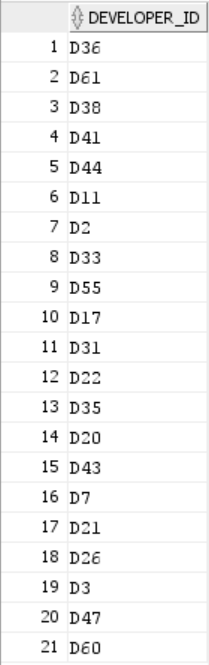
FROM XDEVELOPS DV

WHERE DV.GAME\_ID NOT IN

(SELECT G.GAME\_ID

FROM XGAMES G

WHERE G.GAME\_GENRE = 'Action-Adventure'));



Cardinality: 21

3.Get the ids of cast members that are cast in none of the games with a price greater than 39.99.

SELECT C.CAST\_ID

FROM XCASTMEMBERS C

WHERE C.CAST\_ID IN

(SELECT CA.CAST\_ID

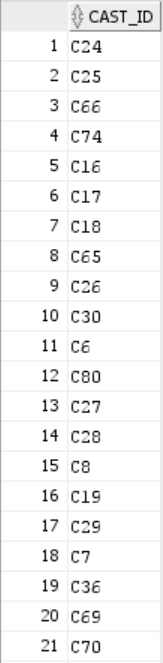
FROM XCASTS CA

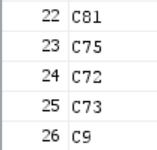
WHERE CA.GAME\_ID NOT IN

(SELECT G.GAME\_ID

FROM XGAMES G

WHERE G.GAME\_PRICE > 39.99));





Cardinality: 26

4.Get the names and locations of all publishers, along with the names and headquarters of the developers they own, if any.

SELECT P.PUBLISHER\_NAME, P.PUBLISHER\_LOCATION, D.DEVELOPER\_NAME, D.DEVELOPER\_HQ

FROM XPUBLISHERS P LEFT JOIN XDEVELOPERS D ON

P.PUBLISHER\_ID = D.PUBLISHER\_ID;





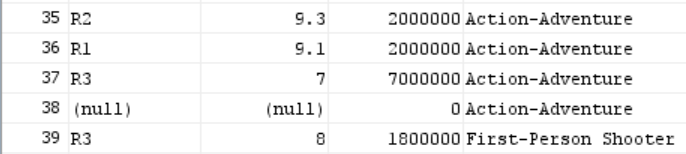
Cardinality: 68

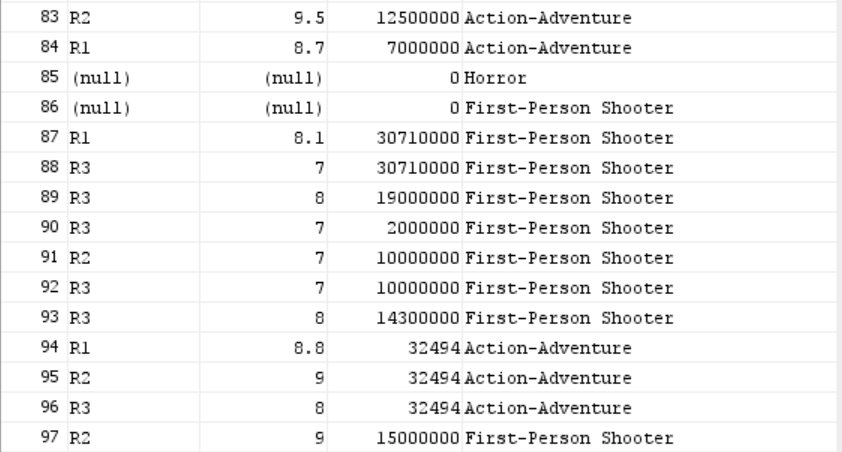
5.Get the number of copies sold and genres of all video games, along with the rating scores they received and the ids of the reviewers that rated them, if any.

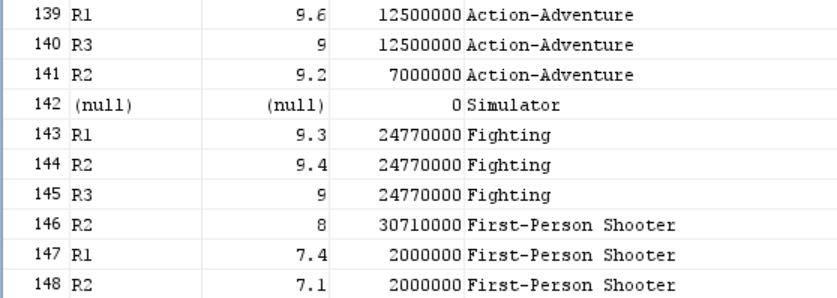
SELECT DISTINCT R.REVIEWER\_ID, R.RATE\_SCORE, G.GAME\_COPIES, G.GAME\_GENRE

FROM XRATES R RIGHT JOIN XGAMES G ON

R.GAME\_ID = G.GAME\_ID;







Cardinality: 217

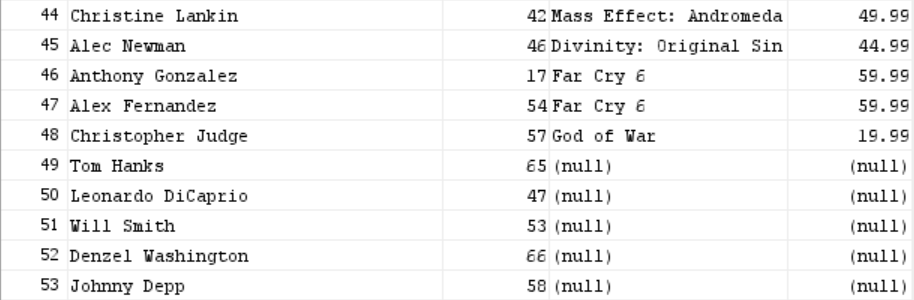
6.Get the names and ages of all cast members along with the names and prices of video games they were cast in, if any, and include names and prices of all video games along with the names and ages of the cast members they cast, if any.

SELECT C.CAST\_NAME, C.CAST\_AGE, G.GAME\_NAME, G.GAME\_PRICE

FROM XCASTMEMBERS C FULL JOIN XCASTS CA ON

C.CAST\_ID = CA.CAST\_ID FULL JOIN XGAMES G ON

CA.GAME\_ID = G.GAME\_ID;





Cardinality: 142

7.Get the names of reviewers along with the rating scores of games that were given a score of less than 8 and created by a developer owned by a publisher located in Santa Monica.

SELECT DISTINCT R.REVIEWER\_NAME, RA.RATE\_SCORE

FROM XREVIEWERS R, XRATES RA, XGAMES G, XDEVELOPS DV, XDEVELOPERS D, XPUBLISHERS P

WHERE R.REVIEWER\_ID = RA.REVIEWER\_ID

AND RA.GAME\_ID = G.GAME\_ID

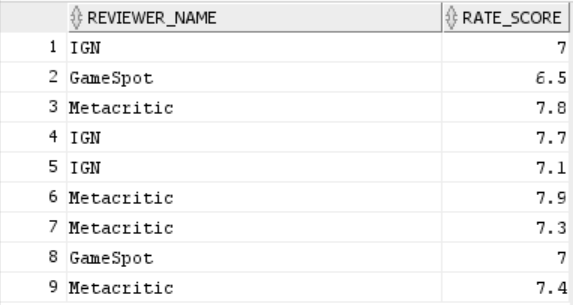
AND G.GAME\_ID = DV.GAME\_ID

AND DV.DEVELOPER\_ID = D.DEVELOPER\_ID

AND D.PUBLISHER\_ID = P.PUBLISHER\_ID

AND RA.RATE\_SCORE < 8

AND P.PUBLISHER\_LOCATION = 'Santa Monica';



Cardinality: 9

8.Get the total number of games that can be played on consoles maintained by Nintendo.

SELECT COUNT(DISTINCT GAME\_NAME) AS TOTAL\_GAMES

FROM XGAMES G, XPLAYS P, XPLATFORMS PL, XMANUFACTURERS M

WHERE G.GAME\_ID = P.GAME\_ID

AND P.PLATFORM\_ID = PL.PLATFORM\_ID

AND PL.MANUFACTURER\_ID = M.MANUFACTURER\_ID

AND M.MANUFACTURER\_NAME = 'Nintendo';



Cardinality: 1

9.Get the prices and the number of units sold for platforms that play games that have cast members whose age is greater than that of Troy Baker.

SELECT DISTINCT PLATFORM\_PRICE, PLATFORM\_UNITS

FROM XPLATFORMS PL, XPLAYS P, XGAMES G, XCASTS CA, XCASTMEMBERS C

WHERE PL.PLATFORM\_ID = P.PLATFORM\_ID

AND P.GAME\_ID = G.GAME\_ID

AND G.GAME\_ID = CA.GAME\_ID

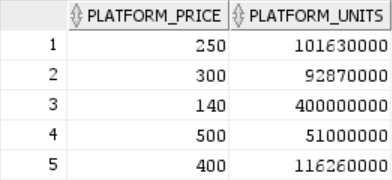
AND CA.CAST\_ID = C.CAST\_ID

AND C.CAST\_AGE >

(SELECT CM.CAST\_AGE

FROM XCASTMEMBERS CM

WHERE CM.CAST\_NAME = 'Troy Baker');



Cardinality: 5

10.Get the ids, names, and countries of manufacturers whose platforms play games that were developed and published by companies in the same location.

SELECT DISTINCT M.MANUFACTURER\_ID, M.MANUFACTURER\_NAME, M.MANUFACTURER\_COUNTRY

FROM XMANUFACTURERS M, XPLATFORMS P, XPLAYS PL, XGAMES G, XDEVELOPS DV, XDEVELOPERS D, XPUBLISHERS P, XPUBLISHES PB

WHERE M.MANUFACTURER\_ID = P.MANUFACTURER\_ID

AND P.PLATFORM\_ID = PL.PLATFORM\_ID

AND PL.GAME\_ID = G.GAME\_ID

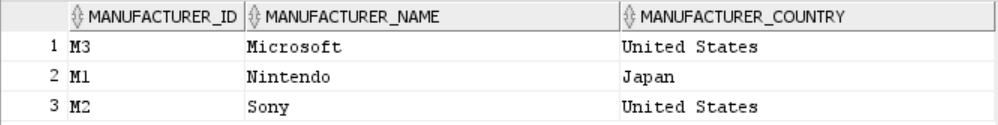
AND G.GAME\_ID = DV.GAME\_ID

AND G.GAME\_ID = PB.GAME\_ID

AND DV.DEVELOPER\_ID = D.DEVELOPER\_ID

AND PB.PUBLISHER\_ID = P.PUBLISHER\_ID

AND D.DEVELOPER\_HQ = P.PUBLISHER\_LOCATION;



Cardinality: 3