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Retro Video Games Lab 2

Database Management 308N-113

Query11

Get Game numbers for games played on any console by a user from the same city as that console's Manufacturer Location.

```
SELECT DISTINCT P.GNum
FROM Users AS U, Consoles AS C, Plays AS P
WHERE U.UNum = P.UNum
AND C.CNum = P.CNum
AND U.Hometown = C.ManuLoc;
```

Query11
GNum
G100
G200
G300
G400
G500
G600

Cardinality: 6

Query12

Name the consoles that have been played by at least one user who is not from the same city as that console's Manufacturer Location.

```
SELECT DISTINCT C.ConsoleName
FROM Users AS U, Consoles AS C, Plays AS P
WHERE U.UNum = P.UNum
AND C.CNum = P.CNum
AND U.Hometown <> C.ManuLoc;
```

Query12
ConsoleName
Atari
Coleco
Gameboy
Intellivision
Nintendo
PlayStation
SegaGenesis

Cardinality: 7

Query13

Get all pairs of Game numbers such that some user has played both the indicated games.

SELECT DISTINCT P1.GNum AS GameName1, P2.GNum AS GameName2

FROM Plays AS P1, Plays AS P2

WHERE P1.UNum = P2.UNum

AND P1.GNum <= P2.GNum;

Query13	
GameName1	GameName2
G100	G100
G100	G200
G100	G300
G100	G400
G100	G500
G100	G600
G200	G200
G200	G300
G200	G400
G200	G500
G200	G600
G300	G300
G300	G400
G300	G500
G300	G600
G400	G400

G400	G500
G400	G600
G500	G500
G500	G600
G600	G600

Cardinality: 21

Query14

Get the total number of consoles that have been played by user U50.

```
SELECT COUNT(P.CNum) AS TotalNumberOfConsoles
```

```
FROM Plays AS P
```

```
WHERE P.UNum = 'U50';
```

Query14	
TotalNumberOfConsoles	
	10

Cardinality: 1

Query15

Get the total TimesPlayed for user U10 of game G100.

```
SELECT SUM(TimesPlayed) AS TotalTimesPlayed
```

```
FROM Plays AS P
```

```
WHERE P.UNum = 'U10'
```

```
AND P.GNum = 'G100';
```

Query15	
TotalTimesPlayed	
	94

Cardinality: 1

Query16

For each game played on a console, get the game number, the console number, and the total TimesPlayed (for that game played on that console).

```

SELECT P.GNum, P.CNum, SUM(TimesPlayed) AS TotalTimesPlayed
FROM Plays AS P
GROUP BY P.GNum, P.CNum;

```

Query16		
GNum	CNum	TotalTimesPlayed
G100	C1	22
G100	C4	87
G200	C2	27
G200	C4	14
G300	C1	65
G300	C2	25
G300	C3	27
G300	C4	57
G300	C5	69
G300	C6	44
G300	C7	86
G400	C2	52
G400	C4	8
G500	C2	14
G500	C4	44
G500	C5	56
G500	C7	1
G600	C2	24
G600	C3	33
G600	C4	55
G600	C7	38

Cardinality: 21

Query17

Get game numbers of games played with an average TimesPlayed of more than 30.

```

SELECT P.GNum
FROM Plays AS P

```

GROUP BY P.GNum

HAVING AVG(P.TimesPlayed) > 30;

Query17

GNum
G100
G300
G600

Cardinality: 3

Query18

Name the consoles that have been played by Sheldon.

SELECT C.CNum

FROM Users AS U, Plays AS P, Consoles AS C

WHERE U.UNum = P.UNum

AND C.CNum = P.CNum

AND U.UserName = 'Sheldon';

Query18

CNum
C1
C4

Cardinality: 2

Query19

Get the total of the ListPrices of games played by Sheldon.

SELECT SUM(ListPrice) AS TotalListPrices

FROM Users AS U, Plays AS P, Games AS G

WHERE U.UNum = P.UNum

AND P.GNum = G.GNum

AND U.UserName = 'Sheldon';

Query19
TotalListPrices
19.98

Cardinality: 1

Query20

Name the games played on any console manufactured in Tokyo.

```
SELECT DISTINCT G.GameName
FROM Games AS G, Consoles AS C, Plays AS P
WHERE G.GNum = P.GNum
AND P.CNum = C.CNum
AND C.ManuLoc = 'Tokyo';
```

Query20
GameName
MarioBros
Pitfall
Zelda

Cardinality: 3