## Retro Games Extra Credit Lab

**Query7NaturalJoin:** Get the console name and number with every game that has been played on it with how many times it has been played.

SELECT cnum, gnum, consolename, timesplayed

FROM Consoles NATURAL JOIN Plays;

| CNum | GNum | ConsoleName   | TimesPlayed |
|------|------|---------------|-------------|
| C1   | G100 | Atari         | 22          |
| C1   | G300 | Atari         | 21          |
| C1   | G300 | Atari         | 44          |
| C2   | G300 | Intellivision | 25          |
| C2   | G400 | Intellivision | 52          |
| C2   | G600 | Intellivision | 24          |
| C2   | G200 | Intellivision | 27          |
| C2   | G500 | Intellivision | 14          |
| C3   | G600 | Nintendo      | 33          |
| C3   | G300 | Nintendo      | 27          |
| C4   | G100 | PlayStation   | 72          |
| C4   | G600 | PlayStation   | 55          |
| C4   | G300 | PlayStation   | 2           |
| C4   | G500 | PlayStation   | 44          |
| C4   | G100 | PlayStation   | 15          |
| C4   | G400 | PlayStation   | 8           |
| C4   | G200 | PlayStation   | 14          |
| C4   | G300 | PlayStation   | 55          |
| C5   | G500 | Coleco        | 56          |
| C5   | G300 | Coleco        | 69          |
| C6   | G300 | GameBoy       | 44          |
| C7   | G300 | SegaGenesis   | 86          |
| C7   | G600 | SegaGenesis   | 38          |
| C7   | G500 | SegaGenesis   | 1           |

**Cardinality: 24** 

**Query8JoinUsing:** Get the game name and number and how many times it has been played on each console.

SELECT gnum, gamename, cnum, timesplayed

FROM games JOIN plays USING (gnum);

| GNum | GameName  | CNum | TimesPlayed |
|------|-----------|------|-------------|
| G100 | Pong      | C1   | 22          |
| G100 | Pong      | C4   | 15          |
| G100 | Pong      | C4   | 72          |
| G200 | PacMan    | C2   | 27          |
| G200 | PacMan    | C4   | 14          |
| G300 | Zelda     | C7   | 86          |
| G300 | Zelda     | C4   | 2           |
| G300 | Zelda     | C1   | 21          |
| G300 | Zelda     | C6   | 44          |
| G300 | Zelda     | C4   | 55          |
| G300 | Zelda     | C3   | 27          |
| G300 | Zelda     | C2   | 25          |
| G300 | Zelda     | C1   | 44          |
| G300 | Zelda     | C5   | 69          |
| G400 | Doom      | C2   | 52          |
| G400 | Doom      | C4   | 8           |
| G500 | MarioBros | C2   | 14          |
| G500 | MarioBros | C4   | 44          |
| G500 | MarioBros | C5   | 56          |
| G500 | MarioBros | C7   | 1           |
| G600 | Pitfall   | C4   | 55          |
| G600 | Pitfall   | C2   | 24          |
| G600 | Pitfall   | C3   | 33          |
| G600 | Pitfall   | C7   | 38          |

Cardinality: 24

**Query9JoinOn:** Get the users name and number along with each game they have played and what consoles they played it on.

SELECT users.unum, users.username, plays.gnum, plays.cnum

FROM users JOIN plays ON users.unum = plays.unum;

| UNum | UserName | GNum | CNum |
|------|----------|------|------|
| U10  | Sheldon  | G100 | C1   |
| U10  | Sheldon  | G100 | C4   |
| U20  | Missy    | G500 | C2   |
| U20  | Missy    | G300 | C4   |
| U20  | Missy    | G300 | C5   |
| U20  | Missy    | G300 | C6   |
| U20  | Missy    | G300 | C7   |
| U20  | Missy    | G300 | C2   |
| U20  | Missy    | G300 | C1   |
| U20  | Missy    | G300 | C3   |
| U30  | Meemaw   | G300 | C1   |
| U30  | Meemaw   | G400 | C2   |
| U40  | George   | G600 | C3   |
| U40  | George   | G600 | C7   |
| U50  | Mary     | G200 | C4   |
| U50  | Mary     | G600 | C4   |
| U50  | Mary     | G400 | C4   |
| U50  | Mary     | G500 | C4   |
| U50  | Mary     | G500 | C5   |
| U50  | Mary     | G500 | C7   |
| U50  | Mary     | G600 | C2   |
| U50  | Mary     | G200 | C2   |
| U50  | Mary     | G100 | C4   |
| U50  | Mary     | G300 | C4   |

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