CREATE Queries:

mysql> CREATE TABLE categories (cat\_id int NOT NULL AUTO\_INCREMENT, cat\_name var

char(50), PRIMARY KEY (cat\_id));

Query OK, 0 rows affected (0.42 sec)

mysql> CREATE TABLE console (c\_id int NOT NULL AUTO\_INCREMENT, c\_name varchar(50

), rel\_date DATE, PRIMARY KEY (c\_id));

Query OK, 0 rows affected (0.38 sec)

mysql> CREATE TABLE transaction (t\_id int NOT NULL AUTO\_INCREMENT, amt\_paid floa

t, market\_value float,cond varchar(20), completeness varchar(10), PRIMARY KEY (t

\_id));

Query OK, 0 rows affected (0.38 sec)

mysql> CREATE TABLE videogame (v\_id int NOT NULL AUTO\_INCREMENT, cat\_id int, v\_n

ame varchar(50), PRIMARY KEY (v\_id), FOREIGN KEY (cat\_id) REFERENCES categories(

cat\_id) ON DELETE CASCADE ON UPDATE CASCADE);

Query OK, 0 rows affected (0.58 sec)

mysql> CREATE TABLE releases (v\_id int, c\_id int, t\_id int, PRIMARY KEY(v\_id,c\_i

d,t\_id), FOREIGN KEY (v\_id) REFERENCES videogame(v\_id) ON DELETE CASCADE ON UPDA

TE CASCADE, FOREIGN KEY(c\_id) REFERENCES console(c\_id) ON DELETE CASCADE ON UPDA

TE CASCADE, FOREIGN KEY(t\_id) REFERENCES transaction(t\_id) ON DELETE CASCADE ON

UPDATE CASCADE);

Query OK, 0 rows affected (0.55 sec)

DATA ENTRY:

INSERT INTO `videogame`.`categories` (`cat\_id`, `cat\_name`) VALUES (NULL, 'Role Playing'), (NULL, 'Action'), (NULL, 'Sports'), (NULL, 'Adventure');

INSERT INTO `videogame`.`console` (`c\_id`, `c\_name`, `rel\_date`) VALUES (NULL, 'Atari Jaguar', '1993-11-15'), (NULL, 'Playstation Console', '1994-12-03'), (NULL, 'Nintendo GameClub', '2001-09-14'), (NULL, 'Xbox', '2001-11-15'), (NULL, 'Playstation 3', '2006-11-11'), (NULL, 'Xbox One', '2013-11-22'), (NULL, 'Xbox 360', '2005-11-22'), (NULL, 'Playstation 4', '2013-11-15');

INSERT INTO `videogame`.`videogame` (`v\_id`, `cat\_id`, `v\_name`) VALUES (NULL, '1', 'Wolfenstein 3D'), (NULL, '1', 'Alien Vs Predator'), (NULL, '1', 'Doom'), (NULL, '2', 'Rayman'), (NULL, '2', 'Philosoma'), (NULL, '4', 'Simulation'), (NULL, '3', 'Mario Cart: Double Dash'), (NULL, '3', 'Crazy Taxi'), (NULL, '1', 'Halo'), (NULL, '4', 'GTA - IV'), (NULL, '1', 'Call of Duty'), (NULL, '1', 'Halo 2'), (NULL, '2', 'Killer Instinct'), (NULL, '3', 'Fifa 14'), (NULL, '2', 'Battlefield 4'), (NULL, '3', 'Fifa 15');

INSERT INTO `videogame`.`transaction` (`t\_id`, `amt\_paid`, `market\_value`, `cond`, `completeness`) VALUES (NULL, '12.00', '10.50', 'very good', 'CIB'), (NULL, '10.50', '5.75', 'good', 'CB'), (NULL, '5.00', '10.00', 'acceptable', 'CIB'), (NULL, '20.52', '25.50', 'mint', 'poor'), (NULL, '25.50', '10.00', 'poor', 'CI'), (NULL, '15.00', '5.00', 'poor', 'C'), (NULL, '10.00', '15.00', 'mint', 'CIB'), (NULL, '12.50', '15.20', 'acceptable', 'CB'), (NULL, '20.00', '18.00', 'mint', 'CIB'), (NULL, '28.54', '30.50', 'mint', 'CIB'), (NULL, '30.00', '35.00', 'mint', 'CIB'), (NULL, '30.00', '20.00', 'acceptable', 'CB'), (NULL, '25.00', '10.00', 'poor', 'C'), (NULL, '50.00', '60.00', 'mint', 'CIB'), (NULL, '75.25', '90.00', 'mint', 'CIB'), (NULL, '80.00', '70.00', 'new', 'CIB'), (NULL, '110.50', '120.50', 'new', 'CIB'), (NULL, '90.75', '80.50', 'acceptable', 'CB'), (NULL, '130.50', '100.00', 'mint', 'CB'), (NULL, '70.25', '50.00', 'poor', 'C'), (NULL, '60.25', '50.25', 'very good', 'CI'), (NULL, '100.00', '80.00', 'very good', 'CIB'), (NULL, '150.00', '100.00', 'new', 'CIB'), (NULL, '200.00', '230.00', 'new', 'CIB');

INSERT INTO `videogame`.`releases` (`v\_id`, `c\_id`, `t\_id`) VALUES ('1', '1', '1'), ('1', '1', '2'), ('2', '1', '3'), ('3', '1', '4'), ('3', '2', '5'), ('3', '2', '6'), ('4', '2', '7'), ('5', '2', '8'), ('6', '2', '9'), ('7', '3', '10'), ('8', '3', '11'), ('9', '4', '12'), ('9', '4', '13'), ('9', '5', '14'), ('10', '5', '15'), ('11', '5', '16'), ('9', '6', '17'), ('12', '6', '18'), ('13', '6', '19'), ('14', '6', '20'), ('10', '7', '21'), ('11', '7', '22'), ('15', '7', '23'), ('15', '8', '24'), ('16', '8', '24');

Queries:

1. SELECT DISTINCT v.v\_name,c.c\_name FROM videogame v JOIN releases r ON v.v\_id=r.v\_id JOIN console c ON c.c\_id=r.c\_id;

OR

SELECT v.v\_name,c.c\_name FROM videogame v JOIN releases r ON v.v\_id=r.v\_id JOIN console c ON c.c\_id=r.c\_id GROUP BY v.v\_name HAVING count(v.v\_name)=1;

1. SELECT v.v\_name,c.c\_name FROM videogame v JOIN releases r ON v.v\_id=r.v\_id JOIN console c ON c.c\_id=r.c\_id GROUP BY v.v\_name HAVING count(v.v\_name)>1;
2. Select sum(amt\_paid) as TotalCost from transaction;
3. Select vg.v\_name from videogame vg JOIN releases r ON vg.v\_id = r.v\_id JOIN transaction t ON r.t\_id= t.t\_id where t.t\_id IN (select t\_id from transaction where completeness = "CIB");

Select vg.v\_name from videogame vg JOIN releases r ON vg.v\_id = r.v\_id JOIN transaction t ON r.t\_id= t.t\_id where t.t\_id IN (select t\_id from transaction where completeness = "C" OR completeness = "CB" OR completeness = "CI");

1. select vg.v\_name from videogame vg JOIN releases r ON vg.v\_id = r.v\_id JOIN transaction t ON r.t\_id = t.t\_id where t.t\_id IN (select t\_id from transaction where market\_value IN (Select max(market\_value) from transaction));
2. select vg.v\_name from videogame vg JOIN releases r ON vg.v\_id = r.v\_id JOIN transaction t ON r.t\_id = t.t\_id where t.t\_id IN (select t\_id from transaction where amt\_paid < market\_value);
3. select vg.v\_name from videogame vg JOIN releases r ON vg.v\_id = r.v\_id JOIN (SELECT t\_id, (market\_value-amt\_paid) AS difference FROM transaction ORDER BY difference DESC LIMIT 1) t ON r.t\_id = t.t\_id;