Task 3

3a)

CREATE TABLE `album` (   `album\_id` int(50) NOT NULL,   `album\_name` varchar(50) DEFAULT NULL,   `album\_desc` varchar(50),   `rating` varchar(45) DEFAULT NULL,   PRIMARY KEY (`album\_id`) );

CREATE TABLE `artist` (   `artist\_id` int(50) NOT NULL,   `artist\_name` varchar(50) DEFAULT NULL,   PRIMARY KEY (`artist\_id`) ) ;

CREATE TABLE `genre` (   `genre\_id` int(50) NOT NULL,   `genre` varchar(50),   `genre\_desc` varchar(50) DEFAULT NULL,   PRIMARY KEY (`genre\_id`) );

CREATE TABLE `album\_artist` (

`album\_id` int(50) NOT NULL DEFAULT '0',

`artist\_id` int(50) NOT NULL DEFAULT '0',

PRIMARY KEY (`album\_id`,`artist\_id`),

CONSTRAINT FOREIGN KEY (`album\_id`) REFERENCES `album` (`album\_id`),

CONSTRAINT FOREIGN KEY (`artist\_id`) REFERENCES `artist` (`artist\_id`)

) ;

CREATE TABLE `album\_genre` (

`album\_id` int(50) NOT NULL DEFAULT '0',

`genre\_id` int(50) NOT NULL DEFAULT '0',

PRIMARY KEY (`album\_id`,`genre\_id`),

CONSTRAINT `album\_genre\_ibfk\_1` FOREIGN KEY (`album\_id`) REFERENCES `album` (`album\_id`),

CONSTRAINT `album\_genre\_ibfk\_2` FOREIGN KEY (`genre\_id`) REFERENCES `genre` (`genre\_id`)

) ;

CREATE TABLE `my\_collection` (

`my\_id` int(50) NOT NULL DEFAULT '0',

`album\_id` int(50) NOT NULL DEFAULT '0',

`duration` int(50),

`number\_of\_tracks` varchar(50),

`disktype` varchar(50),

`album\_type` varchar(50),

`alcond` varchar(50),

`recorddate` varchar(50),

`releasedate` varchar(50) DEFAULT NULL,

`price` varchar(50) DEFAULT NULL,

`purchase\_date` varchar(50) DEFAULT NULL,

`numberofcopies` int(50) DEFAULT NULL,

PRIMARY KEY (`my\_id`,`album\_id`),

CONSTRAINT ` FOREIGN KEY (`album\_id`) REFERENCES `album` (`album\_id`)

) ;

3b)

**Album:**

INSERT INTO `album` (`album\_id`,`album\_name`,`album\_desc`,`rating`) VALUES (1,'Master of puppets','favorite','5');

INSERT INTO `album` (`album\_id`,`album\_name`,`album\_desc`,`rating`) VALUES (2,'Load','another brick in the wall','5');

INSERT INTO `album` (`album\_id`,`album\_name`,`album\_desc`,`rating`) VALUES (3,'Mall','parkit','3');

INSERT INTO `album` (`album\_id`,`album\_name`,`album\_desc`,`rating`) VALUES (4,'Slumdog','BGM','2');

INSERT INTO `album` (`album\_id`,`album\_name`,`album\_desc`,`rating`) VALUES (5,'back in black','highway to hell','2');

INSERT INTO `album` (`album\_id`,`album\_name`,`album\_desc`,`rating`) VALUES (6,'Powerslave','favorite','1');

INSERT INTO `album` (`album\_id`,`album\_name`,`album\_desc`,`rating`) VALUES (7,'Roja','ARR','4');

INSERT INTO `album` (`album\_id`,`album\_name`,`album\_desc`,`rating`) VALUES (8,'Death Magnetic','Rock','5');

INSERT INTO `album` (`album\_id`,`album\_name`,`album\_desc`,`rating`) VALUES (9,'Ride the lightening','awesome','3');

INSERT INTO `album` (`album\_id`,`album\_name`,`album\_desc`,`rating`) VALUES (10,'another brick in the wall','no education','4');

**Artist:**

INSERT INTO `artist` (`artist\_id`,`artist\_name`) VALUES (1,'Metallica');

INSERT INTO `artist` (`artist\_id`,`artist\_name`) VALUES (2,'pink floyd');

INSERT INTO `artist` (`artist\_id`,`artist\_name`) VALUES (3,'linkin park');

INSERT INTO `artist` (`artist\_id`,`artist\_name`) VALUES (4,'Slumdog');

INSERT INTO `artist` (`artist\_id`,`artist\_name`) VALUES (5,'acdc');

INSERT INTO `artist` (`artist\_id`,`artist\_name`) VALUES (6,NULL);

INSERT INTO `artist` (`artist\_id`,`artist\_name`) VALUES (7,NULL);

INSERT INTO `artist` (`artist\_id`,`artist\_name`) VALUES (8,'ARR');

INSERT INTO `artist` (`artist\_id`,`artist\_name`) VALUES (9,NULL);

INSERT INTO `artist` (`artist\_id`,`artist\_name`) VALUES (10,'Iron Maiden');

**Genre:**

INSERT INTO `genre` (`genre\_id`,`genre`,`genre\_desc`) VALUES (1,'hard rock','headbang');

INSERT INTO `genre` (`genre\_id`,`genre`,`genre\_desc`) VALUES (2,'pop','have fun');

INSERT INTO `genre` (`genre\_id`,`genre`,`genre\_desc`) VALUES (3,'metal','listen');

INSERT INTO `genre` (`genre\_id`,`genre`,`genre\_desc`) VALUES (4,'classical','rythym');

INSERT INTO `genre` (`genre\_id`,`genre`,`genre\_desc`) VALUES (5,'country','normal');

INSERT INTO `genre` (`genre\_id`,`genre`,`genre\_desc`) VALUES (6,'techno','dj');

**Album\_genre:**

INSERT INTO `album\_genre` (`album\_id`,`genre\_id`) VALUES (1,1);

INSERT INTO `album\_genre` (`album\_id`,`genre\_id`) VALUES (6,1);

INSERT INTO `album\_genre` (`album\_id`,`genre\_id`) VALUES (3,2);

INSERT INTO `album\_genre` (`album\_id`,`genre\_id`) VALUES (8,2);

INSERT INTO `album\_genre` (`album\_id`,`genre\_id`) VALUES (2,3);

INSERT INTO `album\_genre` (`album\_id`,`genre\_id`) VALUES (5,3);

INSERT INTO `album\_genre` (`album\_id`,`genre\_id`) VALUES (10,3);

INSERT INTO `album\_genre` (`album\_id`,`genre\_id`) VALUES (4,4);

INSERT INTO `album\_genre` (`album\_id`,`genre\_id`) VALUES (7,4);

INSERT INTO `album\_genre` (`album\_id`,`genre\_id`) VALUES (4,5);

INSERT INTO `album\_genre` (`album\_id`,`genre\_id`) VALUES (7,5);

INSERT INTO `album\_genre` (`album\_id`,`genre\_id`) VALUES (9,5);

INSERT INTO `album\_genre` (`album\_id`,`genre\_id`) VALUES (5,6);

**Album\_artist:**

INSERT INTO `album\_artist` (`album\_id`,`artist\_id`) VALUES (1,1);

INSERT INTO `album\_artist` (`album\_id`,`artist\_id`) VALUES (8,1);

INSERT INTO `album\_artist` (`album\_id`,`artist\_id`) VALUES (1,2);

INSERT INTO `album\_artist` (`album\_id`,`artist\_id`) VALUES (2,2);

INSERT INTO `album\_artist` (`album\_id`,`artist\_id`) VALUES (9,2);

INSERT INTO `album\_artist` (`album\_id`,`artist\_id`) VALUES (10,2);

INSERT INTO `album\_artist` (`album\_id`,`artist\_id`) VALUES (3,3);

INSERT INTO `album\_artist` (`album\_id`,`artist\_id`) VALUES (2,4);

INSERT INTO `album\_artist` (`album\_id`,`artist\_id`) VALUES (7,4);

INSERT INTO `album\_artist` (`album\_id`,`artist\_id`) VALUES (3,6);

INSERT INTO `album\_artist` (`album\_id`,`artist\_id`) VALUES (5,7);

INSERT INTO `album\_artist` (`album\_id`,`artist\_id`) VALUES (2,8);

INSERT INTO `album\_artist` (`album\_id`,`artist\_id`) VALUES (4,8);

INSERT INTO `album\_artist` (`album\_id`,`artist\_id`) VALUES (5,8);

INSERT INTO `album\_artist` (`album\_id`,`artist\_id`) VALUES (5,9);

INSERT INTO `album\_artist` (`album\_id`,`artist\_id`) VALUES (6,9);

INSERT INTO `album\_artist` (`album\_id`,`artist\_id`) VALUES (5,10);

INSERT INTO `album\_artist` (`album\_id`,`artist\_id`) VALUES (6,10);

**My\_Collection:**

INSERT INTO `my\_collection` (`my\_id`,`album\_id`,`duration`,`number\_of\_tracks`,`disktype`,`album\_type`,`alcond`,`recorddate`,`releasedate`,`price`,`purchase\_date`,`numberofcopies`,`classic`) VALUES (1,1,1510,'5','vinyl','band','good','12-1-1988','2-2-1990','20','1-10-1995',1,'1');

INSERT INTO `my\_collection` (`my\_id`,`album\_id`,`duration`,`number\_of\_tracks`,`disktype`,`album\_type`,`alcond`,`recorddate`,`releasedate`,`price`,`purchase\_date`,`numberofcopies`,`classic`) VALUES (2,1,460,'2','Vinyl','Band','Mint','1-11-985','2-3-1988','25','10-12-1994',2,'1');

INSERT INTO `my\_collection` (`my\_id`,`album\_id`,`duration`,`number\_of\_tracks`,`disktype`,`album\_type`,`alcond`,`recorddate`,`releasedate`,`price`,`purchase\_date`,`numberofcopies`,`classic`) VALUES (3,10,1410,'10','vinyl','Compilation','Mint','10-5-1988','2-4-2000','23','8-8-1990',1,'1');

INSERT INTO `my\_collection` (`my\_id`,`album\_id`,`duration`,`number\_of\_tracks`,`disktype`,`album\_type`,`alcond`,`recorddate`,`releasedate`,`price`,`purchase\_date`,`numberofcopies`,`classic`) VALUES (4,7,2010,'10','Vinyl','Compilation','mint','5-10-1991','10-5-1995','15',NULL,4,'0');

INSERT INTO `my\_collection` (`my\_id`,`album\_id`,`duration`,`number\_of\_tracks`,`disktype`,`album\_type`,`alcond`,`recorddate`,`releasedate`,`price`,`purchase\_date`,`numberofcopies`,`classic`) VALUES (5,9,440,'1','CD','single','good','1-12-2012',NULL,'30','9-10-2015',3,'1');

INSERT INTO `my\_collection` (`my\_id`,`album\_id`,`duration`,`number\_of\_tracks`,`disktype`,`album\_type`,`alcond`,`recorddate`,`releasedate`,`price`,`purchase\_date`,`numberofcopies`,`classic`) VALUES (6,10,1410,'2','Vinyl','Band','poor','2-3-2015','10-10-2015','0.5',NULL,5,'0');

INSERT INTO `my\_collection` (`my\_id`,`album\_id`,`duration`,`number\_of\_tracks`,`disktype`,`album\_type`,`alcond`,`recorddate`,`releasedate`,`price`,`purchase\_date`,`numberofcopies`,`classic`) VALUES (7,6,440,'1','cd','single','Mint','20-12-1976','5-5-1980','12','11-12-1988',4,'0');

INSERT INTO `my\_collection` (`my\_id`,`album\_id`,`duration`,`number\_of\_tracks`,`disktype`,`album\_type`,`alcond`,`recorddate`,`releasedate`,`price`,`purchase\_date`,`numberofcopies`,`classic`) VALUES (8,7,440,'1','cd','single','acceptable','1-5-1976','6-6-1980','10','12-11-1984',5,'1');

INSERT INTO `my\_collection` (`my\_id`,`album\_id`,`duration`,`number\_of\_tracks`,`disktype`,`album\_type`,`alcond`,`recorddate`,`releasedate`,`price`,`purchase\_date`,`numberofcopies`,`classic`) VALUES (9,5,540,'1','CD','single','mint','5-5-200','10-6-2002','10','8-5-2003',4,'0');

INSERT INTO `my\_collection` (`my\_id`,`album\_id`,`duration`,`number\_of\_tracks`,`disktype`,`album\_type`,`alcond`,`recorddate`,`releasedate`,`price`,`purchase\_date`,`numberofcopies`,`classic`) VALUES (10,2,480,'1','CD','Band','acceptable','4-10-2003','11-7-2004','10','7-7-2005',1,'0');

INSERT INTO `my\_collection` (`my\_id`,`album\_id`,`duration`,`number\_of\_tracks`,`disktype`,`album\_type`,`alcond`,`recorddate`,`releasedate`,`price`,`purchase\_date`,`numberofcopies`,`classic`) VALUES (11,3,1200,'4','Vinyl','Compilation','Poor','6-10-1949','8-10-1922','17','7-5-2001',2,'0');

INSERT INTO `my\_collection` (`my\_id`,`album\_id`,`duration`,`number\_of\_tracks`,`disktype`,`album\_type`,`alcond`,`recorddate`,`releasedate`,`price`,`purchase\_date`,`numberofcopies`,`classic`) VALUES (12,4,1530,'5','CD','Compilation','Good','6-11-1927','8-8-1949','30','5-9-1992',4,'0');

INSERT INTO `my\_collection` (`my\_id`,`album\_id`,`duration`,`number\_of\_tracks`,`disktype`,`album\_type`,`alcond`,`recorddate`,`releasedate`,`price`,`purchase\_date`,`numberofcopies`,`classic`) VALUES (13,8,1000,'3','Vinyl','Compilation','poor','10-11-1998','10-9-1998','0.2','7-11-1998',5,'1');

INSERT INTO `my\_collection` (`my\_id`,`album\_id`,`duration`,`number\_of\_tracks`,`disktype`,`album\_type`,`alcond`,`recorddate`,`releasedate`,`price`,`purchase\_date`,`numberofcopies`,`classic`) VALUES (14,8,1000,'3','Vinyl','Compilation','mint','11-10-1998','8-10-1998','35','26-11-1998',4,'1');

INSERT INTO `my\_collection` (`my\_id`,`album\_id`,`duration`,`number\_of\_tracks`,`disktype`,`album\_type`,`alcond`,`recorddate`,`releasedate`,`price`,`purchase\_date`,`numberofcopies`,`classic`) VALUES (15,2,4030,'2','CD','Single','mint','12-12-2015','10-12-2015','100','9-11-2015',5,'1');

INSERT INTO `my\_collection` (`my\_id`,`album\_id`,`duration`,`number\_of\_tracks`,`disktype`,`album\_type`,`alcond`,`recorddate`,`releasedate`,`price`,`purchase\_date`,`numberofcopies`,`classic`) VALUES (16,2,1230,'1','cd','band','mint','1-2-2014','12-4-2014','10','20-12-2015',2,'1');

**TASK4:**

1. select album\_name,album.album\_id,alcond from album,my\_collection where album.album\_id=my\_collection.album\_id;



1. select count(album\_id) from my\_collection;

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3) select distinct album.album\_id,album\_name from my\_collection,album where album.album\_id=my\_collection.album\_id;



4)select

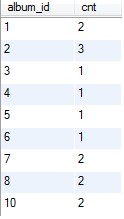
album\_id,count(1) as cnt

from

my\_collection

where releasedate is not null

group by album\_id;



5)select sum(price) from my\_collection;

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6)select

album.album\_id,album\_name, count(1) as cnt

from

album,

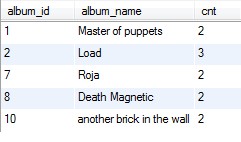
my\_collection

where

album.album\_id = my\_collection.album\_id

group by album\_id

having cnt>1;



\*7)select

album.album\_id, artist.artist\_id,artist\_name,count(1) as cnt

from

album\_artist,

album,

artist,

my\_collection

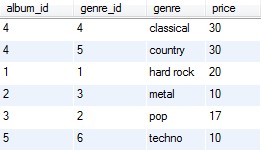
where

album.album\_id = my\_collection.album\_id

and artist.artist\_id = album\_artist.artist\_id and album.album\_id=album\_artist.album\_id

group by artist\_id;

8)select album.album\_id,genre.genre\_id,genre,price from genre,album\_genre,album,my\_collection where album.album\_id=my\_collection.album\_id and album.album\_id=album\_genre.album\_id and genre.genre\_id=album\_genre.genre\_id group by genre having max(price) ;



9)select album.album\_id,album\_name,genre,purchase\_date from album,my\_collection,album\_genre,genre where album.album\_id=my\_collection.album\_id and genre.genre\_id=album\_genre.genre\_id and album.album\_id=album\_genre.album\_id and (genre like'country' or genre like 'classical') having purchase\_date>'1980';



10)select

album.album\_id,album\_name,count(1) as cnt

from

album,

genre,

album\_genre

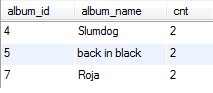
where

album.album\_id = album\_genre.album\_id

and genre.genre\_id = album\_genre.genre\_id

group by album\_id

having cnt>1;



11)select

album.album\_id,album\_name,count(1) as cnt,album\_type

from

album,

genre,

album\_genre,

my\_collection

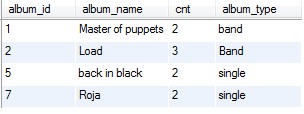
where

album.album\_id = album\_genre.album\_id

and genre.genre\_id = album\_genre.genre\_id and album.album\_id=my\_collection.album\_id and album\_type not like'compilation'

group by album\_id

having cnt>1;



12)select album.album\_id,album\_name,alcond,rating,disktype from album,my\_collection where album.album\_id=my\_collection.album\_id and disktype like 'vinyl'having alcond like'mint' order by rating desc limit 5;



13)select avg(price),disktype from my\_collection group by disktype;



14)

\*15)select price,album.album\_id,album\_name,alcond from album,my\_collection where album.album\_id=my\_collection.album\_id and (price=(select min(price) from my\_collection)) and alcond like 'mint';

16)select count(album.album\_id),album\_name,recorddate from album,my\_collection where album.album\_id=my\_collection.album\_id and alcond like 'mint' group by recorddate;



\*17)select album.album\_id,album\_name,artist.artist\_id,artist\_name from my\_collection,album,artist,album\_artist where album.album\_id=my\_collection.album\_id and album.album\_id=album\_artist.album\_id and artist.artist\_id=album\_artist.artist\_id and artist\_name is null;

18)select album.album\_id,artist.artist\_id,album\_name,artist\_name from album,artist,album\_artist where album.album\_id=album\_artist.album\_id and artist.artist\_id=album\_artist.artist\_id;



19)select

(got/total)\*100 as percentage

from

(select

count(album\_id) as total

from

my\_collection where album\_type = 'single') as t,

(select

count(album.album\_id) as got

from

my\_collection, album

where

album.album\_id = my\_collection.album\_id

and album\_type = 'single'

and rating > 3) as y;

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20) select cd\_weight+vinyl as sum from

(select

count(disktype)\*4 as CD\_WEIGHT

from

my\_collection

where

disktype='CD') as t,

(select

count(disktype)\*9 as vinyl

from

my\_collection

where

disktype='vinyl') as y;

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