Albums – Artist only Main Artist of Songs

play count for current month in Songs table of demo data is also saved in PlayCount table in our DB

delete from HostedBy;

delete from Features;

delete from SponsoredBy;

delete from IsOfGenre;

delete from HasGenre;

delete from PerformedBy;

delete from Contract;

delete from SubscriptionPayments;

delete from User;

delete from PodcastPayments;

delete from SpecialGuest;

delete from Sponsor;

delete from PodcastEpisode;

delete from PodcastHost;

delete from Podcast;

delete from Genre;

delete from RoyaltyPayments;

delete from PlayCount;

delete from RecordLabel;

delete from Artist;

delete from Song;

delete from Album;

drop table HostedBy;

drop table Features;

drop table SponsoredBy;

drop table IsOfGenre;

drop table HasGenre;

drop table PerformedBy;

drop table Contract;

drop table SubscriptionPayments;

drop table User;

drop table PodcastPayments;

drop table SpecialGuest;

drop table Sponsor;

drop table PodcastEpisode;

drop table PodcastHost;

drop table Podcast;

drop table Genre;

drop table RoyaltyPayments;

drop table PlayCount;

drop table RecordLabel;

drop table Artist;

drop table Song;

drop table Album;

CREATE TABLE Album (  
AlbumID INT,  
AlbumName VARCHAR(128) NOT NULL,  
ReleaseYear YEAR NOT NULL,  
Edition VARCHAR(128),  
PRIMARY KEY(AlbumID)  
);

CREATE TABLE Song (  
SongID INT,  
SongTitle VARCHAR(128) NOT NULL,  
Duration TIME NOT NULL,  
AlbumID INT NOT NULL,  
TrackNumber INT NOT NULL,  
ReleaseDate DATE NOT NULL,  
ReleaseCountry VARCHAR(64) NOT NULL,  
Language VARCHAR(64) NOT NULL,  
RoyaltyRate DECIMAL(5,2) NOT NULL,  
PRIMARY KEY(SongID),  
FOREIGN KEY(AlbumID) REFERENCES Album(AlbumID) ON UPDATE CASCADE  
);

CREATE TABLE Genre (  
GenreID INT,  
GenreName VARCHAR(50) NOT NULL,  
PRIMARY KEY(GenreID)  
);

CREATE TABLE Artist (  
ArtistID INT,  
ArtistName VARCHAR(128) NOT NULL,  
Status VARCHAR(128) NOT NULL,  
Type VARCHAR(128) NOT NULL,  
Country VARCHAR(64) NOT NULL,  
PrimaryGenre INT,  
MonthlyListeners INT NOT NULL DEFAULT 0,  
PRIMARY KEY(ArtistID),FOREIGN KEY(PrimaryGenre) REFERENCES Genre(GenreID) ON UPDATE CASCADE  
);

CREATE TABLE RecordLabel (  
LabelName VARCHAR(128),  
Address VARCHAR(255) NOT NULL,  
PRIMARY KEY(LabelName)  
);

CREATE TABLE PlayCount (  
SongID INT,  
YearMonth VARCHAR(7),  
Count INT NOT NULL,  
PRIMARY KEY (SongID, YearMonth),  
FOREIGN KEY (SongID) REFERENCES Song(SongID) ON UPDATE CASCADE  
);

CREATE TABLE RoyaltyPayments (  
SongID INT,  
YearMonth VARCHAR(7),  
Payment DECIMAL(10,2) NOT NULL,  
PaidStatus VARCHAR(10) NOT NULL,  
PRIMARY KEY(SongID, YearMonth),  
FOREIGN KEY(SongID) REFERENCES Song(SongID) ON UPDATE CASCADE  
);

CREATE TABLE Podcast (  
PodcastID INT,  
PodcastName VARCHAR(100) NOT NULL,  
Language VARCHAR(50) NOT NULL,  
Country VARCHAR(50) NOT NULL,  
EpisodeCount INT NOT NULL DEFAULT 0,  
Rating DECIMAL(2,1),  
TotalSubscribers INT NOT NULL DEFAULT 0,  
FeePerEpisode DECIMAL(10,2) NOT NULL,  
PRIMARY KEY(PodcastID)  
);

CREATE TABLE PodcastHost (  
HostID INT,  
FirstName VARCHAR(50) NOT NULL,  
LastName VARCHAR(50) NOT NULL,  
Phone VARCHAR(20) NOT NULL,  
Email VARCHAR(100) NOT NULL,  
City VARCHAR(50) NOT NULL,  
PRIMARY KEY(HostID)  
);

CREATE TABLE PodcastEpisode (  
EpisodeID INT,  
EpisodeTitle VARCHAR(100) NOT NULL,  
PodcastID INT NOT NULL,  
Duration INT NOT NULL,  
ReleaseDate DATE NOT NULL,  
ListeningCount INT NOT NULL DEFAULT 0,  
AdvertisementCount INT NOT NULL DEFAULT 0,  
PRIMARY KEY(EpisodeID),  
FOREIGN KEY (PodcastID) REFERENCES Podcast(PodcastID) ON UPDATE CASCADE  
);

CREATE TABLE Sponsor (  
SponsorID INT,  
SponsorName VARCHAR(128) NOT NULL,  
PRIMARY KEY(SponsorID)  
);

CREATE TABLE SpecialGuest (  
GuestID INT,  
GuestName VARCHAR(128) NOT NULL,  
PRIMARY KEY(GuestID)  
);

CREATE TABLE PodcastPayments (  
HostID INT,  
YearMonth VARCHAR(7),  
Payment DECIMAL(10, 2) NOT NULL,  
PaidStatus VARCHAR(10) NOT NULL,  
PRIMARY KEY (HostID, YearMonth),  
FOREIGN KEY (HostID) REFERENCES PodcastHost(HostID) ON UPDATE CASCADE  
);

CREATE TABLE User (  
UserID INT,  
FirstName VARCHAR(100) NOT NULL,  
LastName VARCHAR(100) NOT NULL,  
Phone VARCHAR(20) NOT NULL,  
Email VARCHAR(100) NOT NULL,  
RegistrationDate DATE NOT NULL,  
StatusOfSubscription VARCHAR(20) NOT NULL,  
MonthlySubscriptionFee DECIMAL(10, 2),  
PRIMARY KEY(UserID)  
);

CREATE TABLE SubscriptionPayments (  
UserID INT,  
YearMonth VARCHAR(7),  
Payment DECIMAL(10, 2) NOT NULL,  
ReceivedStatus VARCHAR(20) NOT NULL,  
PRIMARY KEY (UserID, YearMonth),  
FOREIGN KEY (UserID) REFERENCES User(UserID) ON UPDATE CASCADE  
);

CREATE TABLE Contract (  
ArtistID INT,  
StartDate DATE,  
EndDate DATE NOT NULL,  
LabelName VARCHAR(128) NOT NULL,  
PRIMARY KEY (ArtistID, StartDate),  
FOREIGN KEY (ArtistID) REFERENCES Artist(ArtistID) ON UPDATE CASCADE,  
FOREIGN KEY (LabelName) REFERENCES RecordLabel(LabelName) ON UPDATE CASCADE  
);

CREATE TABLE PerformedBy (  
SongID INT,  
ArtistID INT,  
MainArtistStatus VARCHAR(20) NOT NULL,  
PRIMARY KEY (SongID, ArtistID),  
FOREIGN KEY (SongID) REFERENCES Song(SongID) ON UPDATE CASCADE,  
FOREIGN KEY (ArtistID) REFERENCES Artist(ArtistID) ON UPDATE CASCADE  
);

CREATE TABLE HasGenre (  
SongID INT,  
GenreID INT,  
PRIMARY KEY (SongID, GenreID),  
FOREIGN KEY (SongID) REFERENCES Song(SongID) ON UPDATE CASCADE,  
FOREIGN KEY (GenreID) REFERENCES Genre(GenreID) ON UPDATE CASCADE  
);

CREATE TABLE HostedBy (  
PodcastID INT,  
HostID INT,  
PRIMARY KEY (PodcastID, HostID),  
FOREIGN KEY (PodcastID) REFERENCES Podcast(PodcastID) ON UPDATE CASCADE,  
FOREIGN KEY (HostID) REFERENCES PodcastHost(HostID) ON UPDATE CASCADE  
);

CREATE TABLE IsOfGenre (  
PodcastID INT,  
GenreID INT,  
PRIMARY KEY (PodcastID, GenreID),  
FOREIGN KEY (PodcastID) REFERENCES Podcast(PodcastID) ON UPDATE CASCADE,  
FOREIGN KEY (GenreID) REFERENCES Genre(GenreID) ON UPDATE CASCADE  
);

CREATE TABLE SponsoredBy (  
PodcastID INT,  
SponsorID INT,  
PRIMARY KEY (PodcastID, SponsorID),  
FOREIGN KEY (PodcastID) REFERENCES Podcast(PodcastID) ON UPDATE CASCADE,  
FOREIGN KEY (SponsorID) REFERENCES Sponsor(SponsorID) ON UPDATE CASCADE  
);

CREATE TABLE Features (  
EpisodeID INT,  
SpecialGuestID INT,  
PRIMARY KEY(EpisodeID, SpecialGuestID),  
FOREIGN KEY(EpisodeID) REFERENCES PodcastEpisode(EpisodeID) ON UPDATE CASCADE,  
FOREIGN KEY(SpecialGuestID) REFERENCES SpecialGuest(GuestID) ON UPDATE CASCADE  
);

INSERT INTO Album (AlbumID, AlbumName, ReleaseYear, Edition) VALUES

(4001, 'Electric Oasis', 2023, 'Special Edition'),

(4002, 'Lost in the Echoes', 2023, NULL);

INSERT INTO Song (SongID, SongTitle, Duration, AlbumID, TrackNumber, ReleaseDate, ReleaseCountry, Language, RoyaltyRate) VALUES

(1001, 'Electric Dreamscape', '00:04:53', 4001, 1, '2023-01-01', 'US', 'English', 0.1),

(1002, 'Midnight Mirage', '00:02:15', 4001, 2, '2023-01-05', 'US', 'English', 0.1),

(1003, 'Echoes of You', '00:03:26', 4002, 1, '2023-01-02', 'US', 'English', 0.1),

(1004, 'Rainy Nights', '00:04:05', 4002, 2, '2023-01-06', 'US', 'English', 0.1);

INSERT INTO Genre (GenreID, GenreName) VALUES

(9001, 'Pop'),

(9002, 'Rock');

INSERT INTO Artist (ArtistID, ArtistName, Status, Type, Country, PrimaryGenre, MonthlyListeners) VALUES

(2001, 'Forest', 'active', 'solo', 'US', 9001, 25),

(2002, 'Rain', 'active', 'solo', 'US', 9002, 55);

INSERT INTO RecordLabel (LabelName, Address) VALUES

('Elevate Records', 'New York - USA'),

('Melodic Avenue Music', 'California - USA');

INSERT INTO PlayCount (SongID, YearMonth, Count) VALUES

(1001, '2023-01', 10),

(1001, '2023-02', 20),

(1001, '2023-03', 30),

(1001, '2023-04', 500),

(1002, '2023-01', 100),

(1002, '2023-02', 200),

(1002, '2023-03', 300),

(1002, '2023-04', 1000),

(1003, '2023-01', 1000),

(1003, '2023-02', 2000),

(1003, '2023-03', 3000),

(1003, '2023-04', 100),

(1004, '2023-01', 10000),

(1004, '2023-02', 20000),

(1004, '2023-03', 30000),

(1004, '2023-04', 200);

INSERT INTO Contract (ArtistID, StartDate, EndDate, LabelName) VALUES

(2001, '2022-11-12', '2024-06-28', 'Elevate Records'),

(2002, '2022-10-24', '2024-06-28', 'Melodic Avenue Music');

INSERT INTO PerformedBy (SongID, ArtistID, MainArtistStatus) VALUES

(1001, 2001, 'true'),

(1002, 2001, 'true'),

(1002, 2002, 'false'),

(1003, 2002, 'true'),

(1004, 2002, 'true');

INSERT INTO HasGenre (SongID, GenreID) VALUES

(1001, 9001),

(1002, 9001),

(1003, 9002),

(1004, 9002);

INSERT INTO User (UserID, FirstName, LastName, Phone, Email, RegistrationDate, StatusOfSubscription, MonthlySubscriptionFee) VALUES

(8001, 'Alex', 'A', '+1 (123) 456-7890', 'alex@dbms.com', '2022-12-01', 'true', 10.00),

(8002, 'John', 'J', '+1 (123) 456-7890', 'john@dbms.com', '2022-12-01', 'true', 10.00),

(8003, 'Bob', 'A', '+1 (123) 456-7890', 'bob@dbms.com', '2022-02-01', 'true', 10.00),

(8004, 'Eve', 'A', '+1 (123) 456-7890', 'eve@dbms.com', '2022-03-01', 'true', 10.00);

INSERT INTO Podcast (PodcastID, PodcastName, Language, Country, EpisodeCount, Rating, TotalSubscribers, FeePerEpisode) VALUES

(5001, 'Mind Over Matter: Exploring the Power of the Human Mind', 'English', 'US', 5, 4.5, 10, 10);

INSERT INTO PodcastHost (HostID, FirstName, LastName, Phone, Email, City) VALUES

(6001, 'Matthew', 'Wilson', '555-555-1234', 'mat.wil@example.com', 'New York');

INSERT INTO PodcastEpisode (EpisodeID, EpisodeTitle, PodcastID, Duration, ReleaseDate, ListeningCount, AdvertisementCount) VALUES

(7001, 'The Science of Mindfulness', 5001, 60, '2023-1-15', 100, 0),

(7002, 'Unlocking Your Potential', 5001, 50, '2023-1-27', 200, 0),

(7003, 'The Power of Positive Thinking', 5001, 60, '2023-2-02', 100, 0),

(7004, 'Overcoming Fear and Anxiety', 5001, 50, '2023-2-16', 200, 0),

(7005, 'The Art of Decision Making', 5001, 60, '2023-2-22', 100, 0),

(7006, 'Happiness Habits: Cultivating Joy', 5001, 50, '2023-3-2', 200, 0),

(7007, 'Self-Compassion: Embracing Imperfection', 5001, 60, '2023-3-15', 100, 0),

(7008, 'Peak Performance: Reaching Your Goals', 5001, 50, '2023-3-21', 200, 0),

(7009, 'Mindful Communication: Connecting with Others', 5001, 60, '2023-3-29', 100, 0);

INSERT INTO HostedBy (PodcastID, HostID) VALUES

(5001, 6001);

INSERT INTO RoyaltyPayments (SongID, YearMonth, Payment, PaidStatus) SELECT p.SongID,  
p.YearMonth, s.RoyaltyRate\*p.Count, 'true' FROM PlayCount p INNER JOIN Song s ON p.SongID =  
s.SongID WHERE p.YearMonth<>'2023-04';

INSERT INTO RoyaltyPayments (SongID, YearMonth, Payment, PaidStatus) SELECT p.SongID,  
p.YearMonth, s.RoyaltyRate\*p.Count, 'false' FROM PlayCount p INNER JOIN Song s ON p.SongID =  
s.SongID WHERE p.YearMonth='2023-04';

INSERT INTO PodcastPayments (HostID, YearMonth, Payment, PaidStatus)

SELECT cnt.HostID, DATE\_FORMAT(pe.ReleaseDate, '%Y-%m'), FORMAT(SUM(p.FeePerEpisode +

(pe.AdvertisementCount \* 10)) / cnt.NumHostsPerPodcast,2) AS RevenuePerHost, 'true' FROM

PodcastEpisode pe JOIN Podcast p ON pe.PodcastID = p.PodcastID JOIN ( SELECT h.PodcastID,

h.HostID, hp.NumHostsPerPodcast FROM HostedBy h INNER JOIN ( SELECT PodcastID,

COUNT(HostID) AS NumHostsPerPodcast FROM HostedBy GROUP BY PodcastID ) AS hp ON

h.PodcastID = hp.PodcastID ) AS cnt ON cnt.PodcastID = p.PodcastID WHERE

DATE\_FORMAT(pe.ReleaseDate, '%Y-%m') = '2023-02' or DATE\_FORMAT(pe.ReleaseDate, '%Y-%m') = '2023-01' or DATE\_FORMAT(pe.ReleaseDate, '%Y-%m') = '2023-03'

GROUP BY cnt.HostID,

DATE\_FORMAT(pe.ReleaseDate, '%Y-%m');

INSERT INTO SubscriptionPayments (UserID, YearMonth, Payment, ReceivedStatus)  
VALUES

(8001, '2023-01',10.0, 'true'),

(8001, '2023-02',10.0, 'true'),

(8001, '2023-03',10.0, 'true'),

(8002, '2023-01',10.0, 'true'),

(8002, '2023-02',10.0, 'true'),

(8002, '2023-03',10.0, 'true'),

(8003, '2023-02',10.0, 'true'),

(8003, '2023-03',10.0, 'true'),

(8004, '2023-03',10.0, 'true');