

Table Creation Code

```
CREATE TABLE ALBUM (  
    AlbumID INT NOT NULL AUTO_INCREMENT,  
    Album Varchar(50) NOT NULL,  
    ReleaseYear INT NOT NULL,  
    WeeksOnBillboard INT NULL,  
    PeakBillboardPosition INT NULL,  
    SpotifyPopularity INT NULL,  
    SpotifyURL VarChar(50) Null,  
    CONSTRAINT AlbumPK Primary KEY(AlbumID)  
);
```

```
CREATE TABLE ALBUM_GENRE (  
    AlbumID INT NOT NULL,  
    Genre Varchar(50) NOT NULL,  
    CONSTRAINT AlbumGenrePK Primary Key (AlbumID, Genre)  
);
```

```
CREATE TABLE ALBUM_ARTIST(  
    ArtistID INT NOT NULL,  
    AlbumID INT NOT NULL,  
    Album VarChar(50) NOT NULL,  
    CONSTRAINT AlbumArtistPK Primary Key (ArtistID, AlbumID)  
);
```

```
CREATE TABLE ARTIST(  

```

```
ArtistID INT NOT NULL,  
  ArtistName VarChar(50) NOT NULL,  
  ArtistGender VarChar(50) NOT NULL,  
  ArtistMemberCount INT NOT NULL,  
  ArtistBirthYearSum INT NOT NULL,  
  CONSTRAINT ArtistPK Primary Key (ArtistID)  
);
```

```
CREATE TABLE RANKING(  
  AlbumID INT NOT NULL,  
  RankYear INT NOT NULL,  
  Rank INT NULL,  
  CONSTRAINT RankingPK Primary Key (AlbumID, RankYear)  
);
```

Table Insertion Code

```
INSERT INTO ALBUM (Album, AlbumType, ReleaseYear, WeeksOnBillboard,  
PeakBillboardPosition, SpotifyPopularity, SpotifyURL)
```

```
SELECT
```

```
  Album,
```

```
  Release_Year,
```

```
  Wks_Billboard,
```

```
  Peak_Position,
```

```
  Spotify_Popularity,
```

```
  Spotify_URI
```

```
FROM DBProject;
```

```
INSERT INTO ALBUM_GENRE (AlbumID, Genre)
```

```
SELECT DISTINCT
```

```
    A.AlbumID,
```

```
    G.Genre
```

```
FROM DBProject AS D
```

```
JOIN ALBUM AS A ON D.Album = A.Album
```

```
CROSS JOIN (VALUES (AlbumGenre), (AlbumGenre2), (AlbumGenre3),  
(AlbumGenre4)) AS G(Genre)
```

```
WHERE G.Genre IS NOT NULL;
```

```
INSERT INTO ARTIST (ArtistID, ArtistName, ArtistGender, ArtistMemberCount,  
ArtistBirthYearSum)
```

```
SELECT DISTINCT
```

```
    ROW_NUMBER() OVER (ORDER BY ArtistName) AS ArtistID,
```

```
    ArtistName,
```

```
    Artist_Gender,
```

```
    Member_Count,
```

```
    Artist_Birth_Year_Sum
```

```
FROM DBProject;
```

```
INSERT INTO ALBUM_ARTIST (ArtistID, AlbumID, Album)
```

```
SELECT
```

```
A.ArtistID,  
B.AlbumID,  
B.Album  
FROM DBProject AS D  
JOIN ARTIST AS A ON D.ArtistName = A.ArtistName  
JOIN ALBUM AS B ON D.Album = B.Album;
```

```
-- For 2003 Rank  
INSERT INTO RANKING (AlbumID, RankYear, Rank)  
SELECT  
    A.AlbumID,  
    2003 AS RankYear,  
    2003_Rank  
FROM DBProject AS D  
JOIN ALBUM AS A ON D.Album = A.Album  
WHERE D.2003_Rank IS NOT NULL;
```

```
-- For 2012 Rank  
INSERT INTO RANKING (AlbumID, RankYear, Rank)  
SELECT  
    A.AlbumID,  
    2012 AS RankYear,  
    2012_Rank  
FROM DBProject AS D  
JOIN ALBUM AS A ON D.Album = A.Album  
WHERE D.2012_Rank IS NOT NULL;
```

```
-- For 2020 Rank
INSERT INTO RANKING (AlbumID, RankYear, Rank)
SELECT
    A.AlbumID,
    2020 AS RankYear,
    2020_Rank
FROM DBProject AS D
JOIN ALBUM AS A ON D.Album = A.Album
WHERE D.2020_Rank IS NOT NULL;
```

Adding Foreign Keys

```
ALTER TABLE ALBUM_GENRE
ADD CONSTRAINT FK_AlbumGenre_Album
FOREIGN KEY (AlbumID) REFERENCES ALBUM(AlbumID)
ON DELETE CASCADE
ON UPDATE CASCADE;
```

```
ALTER TABLE ALBUM_ARTIST
ADD CONSTRAINT FK_AlbumArtist_Album
FOREIGN KEY (AlbumID) REFERENCES ALBUM(AlbumID)
ON DELETE
ALBUM
```

AlbumID	Album	ReleaseYear	WeeksOnBillboard	PeakBillboardPosition	SpotifyPopularity	SpotifyURL	AlbumArtist
65	In the Wee Small Hours	1955	14	2	48	spotify:album:3GmwKB1toPZoXeRjZSm9WX	Frank Sinatra
66	Bo Diddley / Go Bo Diddley	1955	NULL	201	50	spotify:album:1cbtDEwxCMhob49OaNR	Bo Diddley
67	Elvis Presley	1956	100	1	58	spotify:album:7GXP5OhYvPVLmcVfO9Iain	Elvis Presley
68	Sonos for Swinain' Lovers!	1956	NULL	2	62	spotify:album:4kca7vXd1Wo5GE2DMafvMc	Frank Sinatra
69	Here's Little Richard	1957	5	13	64	spotify:album:18tV6PLXYvVisdOvk0S7M8	Little Richard
70	The "Chirping" Crickets	1957	NULL	201	47	spotify:album:1KfXNubZrdwHMkAGNBLBa	Buddv Holly
71	Kind of Blue	1959	NULL	201	52	spotify:album:1weenld6IaoidwYuZ1GESA	Miles Davis
72	Giant Steps	1959	NULL	201	36	spotify:album:6NkaPYCMAztIRIKDouJrFo	John Coltrane
73	The Shape of Jazz to Come	1959	NULL	201	34	spotify:album:2PH3Umoa9uffowY76keF	Ornette Coleman
74	Moanin' in the Moonlight	1959	NULL	201	53	spotify:album:76MT4lozC1oSVSYnhHMam	Howlin' Wolf
75	The Genius of Ray Charles	1959	NULL	17	52	spotify:album:4GFWnwli2cvOBo2G1zohV1	Ray Charles
76	At Last!	1960	NULL	201	75	spotify:album:7rd4Por1OP1PTv7adUeeCt	Etta James
77	21	2011	588	1	81	spotify:album:0La1uZv131ZTPaxNWShFXL	Adele
78	Muddy Waters at Newport...	1960	NULL	201	26	spotify:album:7aTcPv1bE0THbiuvDbk1aa	Muddy Waters
79	Sketches of Soain	1960	NULL	201	35	spotify:album:2xvhltn9XWS05xok4C81BD	Miles Davis
80	Amazing Grace	1972	23	7	38	spotify:album:5aUimaO6XepPxbMUj3te0	Aretha Franklin
81	Mama's Gun	2000	25	11	66	spotify:album:3cADvHrdKnIF9ELCn1zbGH	Ervkah Badu
82	Kino of the Delta Blues Sin...	1961	NULL	201	47	spotify:album:2lWaN05o4tG1w6vxxv5BMU	Robert Johnson
83	Din Me Out	1997	NULL	201	46	spotify:album:3tchnNFMh4rC6N1Q0Rhw42	Sleater-Kinney

ALBUM 1 x

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ALBUM_ARTIST

	ArtistID	AlbumID	Album
	1	65	In the Wee Small Hours
	1	68	Sonos for Swinain' Lovers!
	2	66	Bo Diddlev / Go Bo Diddlev
	3	67	Elvis Preslev
	3	217	From Elvis in Memphis
	4	69	Here's Little Richard
	5	70	The "Chirpina"" Crickets"
	6	71	Kind of Blue
	6	79	Sketches of Spain
	6	232	Bitches Brew
	7	72	Giant Steps
	7	137	A Love Supreme
	8	73	The Shape of Jazz to Come
	9	74	Moanin' in the Moonlight
	10	75	The Genius of Ray Charles
	10	89	Modern Sounds in Countr...
	11	76	At Last!
	12	77	21
	13	78	Muddy Waters at Newport

ALBUM_GENRE

	AlbumID	Genre
	65	Bia Band
	66	Rock n' Roll
	67	Rock n' Roll
	68	Bia Band
	69	
	70	Rock n' Roll
	71	Bia Band
	72	Bia Band
	73	Bia Band
	74	Blues
	75	
	76	Soul
	77	Soul
	78	Blues
	79	Bia Band
	80	Soul
	81	Soul
	82	Blues
	83	Prink

BUM_GENRE 1 x

ARTIST

	ArtistID	ArtistName	ArtistGender	ArtistMemberCount	ArtistBirthYearSum
	1	Frank Sinatra	Male	1	1915
	2	Bo Diddlev	Male	1	1928
	3	Elvis Preslev	Male	1	1935
	4	Little Richard	Male	1	1932
	5	Buddv Holly	Male	4	7752
	6	Miles Davis	Male	1	1926
	7	John Coltrane	Male	1	1926
	8	Ornette Coleman	Male	1	1930
	9	Howlin' Wolf	Male	1	1910
	10	Rav Charles	Male	1	1930
	11	Etta James	Female	1	1938
	12	Adele	Female	1	1988
	13	Muddv Waters	Male	1	1913
	14	Aretha Franklin	Female	1	1942
	15	Ervkah Badu	Female	1	1971
	16	Robert Johnson	Male	1	1911
	17	Sleater-Kinnev	Female	3	5911
	18	Robvn	Female	1	1979
	19	Sade	Female	1	1959

ARTIST 1 x

RANKING

AlbumID	RankYear	Rank
65	2003	100
65	2012	101
65	2020	282
66	2003	214
66	2012	216
66	2020	455
67	2003	55
67	2012	56
67	2020	332
68	2003	306
68	2012	308
69	2003	50
69	2012	50
69	2020	227
70	2003	421
70	2012	420
71	2003	12
71	2012	12
71	2020	31

RANKING 1 ✕