**UN-NORMALIZED ALBUMS TABLE**

Album ID Number (PK) <- this is primary key

Album Title

Album Release Date

Album Length

Albums Sold in US

Album Primary Artist

Label Name

Label Address

Label Phone No.

Label Website

Genre 1

Genre 2

Chart Name 1

Chart Debut Position 1

Chart Peak Position 1

Chart Name 2

Chart Debut Position 2

Chart Peak Position 2

Chart Name 3

Chart Debut Position 3

Chart Peak Position 3

Track Title 1

Track Length 1

Track Title 2

Track Length 2

Track Title 3

Track Length 3

**1NF**(Separate repeating fields)

|  |
| --- |
| **ALBUMS (Table #1)** |
| Album ID Number (PK) |
| Album Title |
| Album Release Date |
| Album Length |
| Albums Sold in US |
| Album Primary Artist |
| Label Name |
| Label Address |
| Label Phone No. |
| Label Website |

PK: Primary Key

CPK: Composite Primary Key

FK: Foreign Key

(Needs identifier and relationship with the original table)

(Generate new ID field for items)

(Insert the PK of the original table)

|  |
| --- |
| **TRACK (Table #2)** |
| Album ID Number (CPK) |
| Track ID (CPK) |
| Track Title |
| Track Length |

|  |
| --- |
| **CHART (Table #3)** |
| Album ID Number (CPK) |
| Chart ID (CPK) |
| Chart Name |
| Chart Debut Position |
| Chart Peak Position |

|  |
| --- |
| **GENRE (Table #4)** |
| Album ID Number (CPK) |
| Genre ID (CPK) |
| Genre |

**2NF**

|  |
| --- |
| **ALBUMS (Table #1)** |
| Album ID Number (PK) |
| Album Title |
| Album Release Date |
| Album Length |
| Albums Sold in US |
| Album Primary Artist |
| Label Name |
| Label Address |
| Label Phone No. |
| Label Website |

^^^ This table is not 2NF business, since it does

not have multiple PK fields

(Remove fields that do not depend on all parts of multi-field primary keys)

|  |
| --- |
| **ALBUMS-TRACKS-JOIN (Table #2)** |
| Album ID Number (CPK) |
| Track ID (CPK) |

|  |
| --- |
| **ALBUMS-CHARTS-JOIN (Table #3)** |
| Album ID Number (CPK) |
| Chart ID (CPK) |

|  |
| --- |
| **ALBUMS-GENRES-JOIN (Table #4)** |
| Album ID Number (CPK) |
| Genre ID (CPK) |

|  |
| --- |
| **TRACKS (Table #5)** |
| Track ID (PK) |
| Track Title |
| Track Length |

|  |
| --- |
| **CHARTS (Table #6)** |
| Chart ID (PK) |
| Chart Name |
| Chart Debut Position |
| Chart Peak Position |

|  |
| --- |
| **GENRES (Table #7)** |
| Genre ID (PK) |
| Genre |

**3NF**

|  |
| --- |
| **ALBUMS (Table #1)** |
| Album ID Number (PK) |
| Label ID (FK) |
| Album Title |
| Album Release Date |
| Album Length |
| Albums Sold in US |
| Album Primary Artist |

|  |
| --- |
| **ALBUMS-TRACKS-JOIN (Table #2)** |
| Album ID Number (CPK) |
| Track ID (CPK) |

|  |
| --- |
| **ALBUMS-CHARTS-JOIN (Table #3)** |
| Album ID Number (CPK) |
| Chart ID (CPK) |

|  |
| --- |
| **ALBUMS-GENRES-JOIN (Table #4)** |
| Album ID Number (CPK) |
| Genre ID (CPK) |

(separate transitively dependent fields)

|  |
| --- |
| **LABELS (Table #8)** |
| Label ID (PK) |
| Label Name |
| Label Address |
| Label Phone No. |
| Label Website |

|  |
| --- |
| **TRACKS (Table #5)** |
| Track ID (PK) |
| Track Title |
| Track Length |

|  |
| --- |
| **CHARTS (Table #6)** |
| Chart ID (PK) |
| Chart Name |
| Chart Debut Position |
| Chart Peak Position |

|  |
| --- |
| **GENRES (Table #7)** |
| Genre ID (PK) |
| Genre |