Assignment 1:

A diagram of a flowchart

Description automatically generated  
  
1- Musician entity so I draw it in a rectangle , the musician contain Id number attribute and it’s the identification column to the table so I underlined it , name: Simple attribute , address (street,city) : it means it is composite attribute , phone number : Simple attribute

2- Instrument entity : Name unique so it is p.k in this entity and underlined , muisical key : simple attribute

3- Album entity : Title it is a simple attribute , copyright date : simple attribute , album Identifier: unique then it is a P.K in this entity so I have underlined it

4- Song entity: unique title so it is a primary key so I underlined this attribute , author is a simple attribute

5- musician may play several instruments so It is partial participation ( partial participation) and (many cardinality) from the musician , instrument may be played by several musicians(patial participation) and (many cardinality)

6- album has a number of songs (many cardinality) but song is in a one album ( 1 cardinality) so the total many to one from the song to album

7- song is performed by one or more (total participation) musicians, and a musician may perform a number of songs (partial participation)

8- Each album has exactly one musician(1:1) who acts as its producer. A producer may produce several albums(1:M) so the total cardinality is (M:1) from the album to musician