

Music Database :-

* Notown Record has decided to store information about musicians who perform on its albums. Each musician that records at Notown has an SSN, a name, an address, and a phone number. No musician has more than one phone. Each instrument used in songs recorded at Notown has a unique identification number, a name (e.g. guitar, synthesizer, and flute) and a musical key (e.g. C, B-flat, E-flat). Each album recorded on the Notown label has a unique identification number, a title, a copyright date and a format (e.g. CD or MC). Each song recorded at Notown has a id title and an author. Each musician may play several instruments; and a given instrument may be played by several musicians. Each album has a number of songs on it, but no song may appear on more than one album. Each song is performed by one or more musicians and a musician may perform a number of songs. Each album has exactly one musician who acts as its producer. A musician may produce several albums.

Step 1: Identification of entities.

Step 2: Identifications of attribute for each of the entities

Step 3: Relationship between the entities.

Step 4: Cardinality constraint and participate constraint

Step 5: ER Diagram

Step 6: Relationship Schema Diagram

* Entities :-

MUSICIAN, ALBUM, INSTRUMENT, SONG

* Attribute

* Entities

MUSICIAN, ALBUM, INSTRUMENT, SONG

* Attributes :-

MUSICIAN:- SSN, Name, Address, phone no

ALBUM:- AID, title, copyright Date

INSTRUMENT:-

I-ID, Name, key (c, B-flat, E-flat)

SONG:-

S-ID, Author, Title

③ Relationship :-

MUSICIAN and INSTRUMENT
plays

MUSICIAN and ALBUM
produces

MUSICIAN and SONG
performs

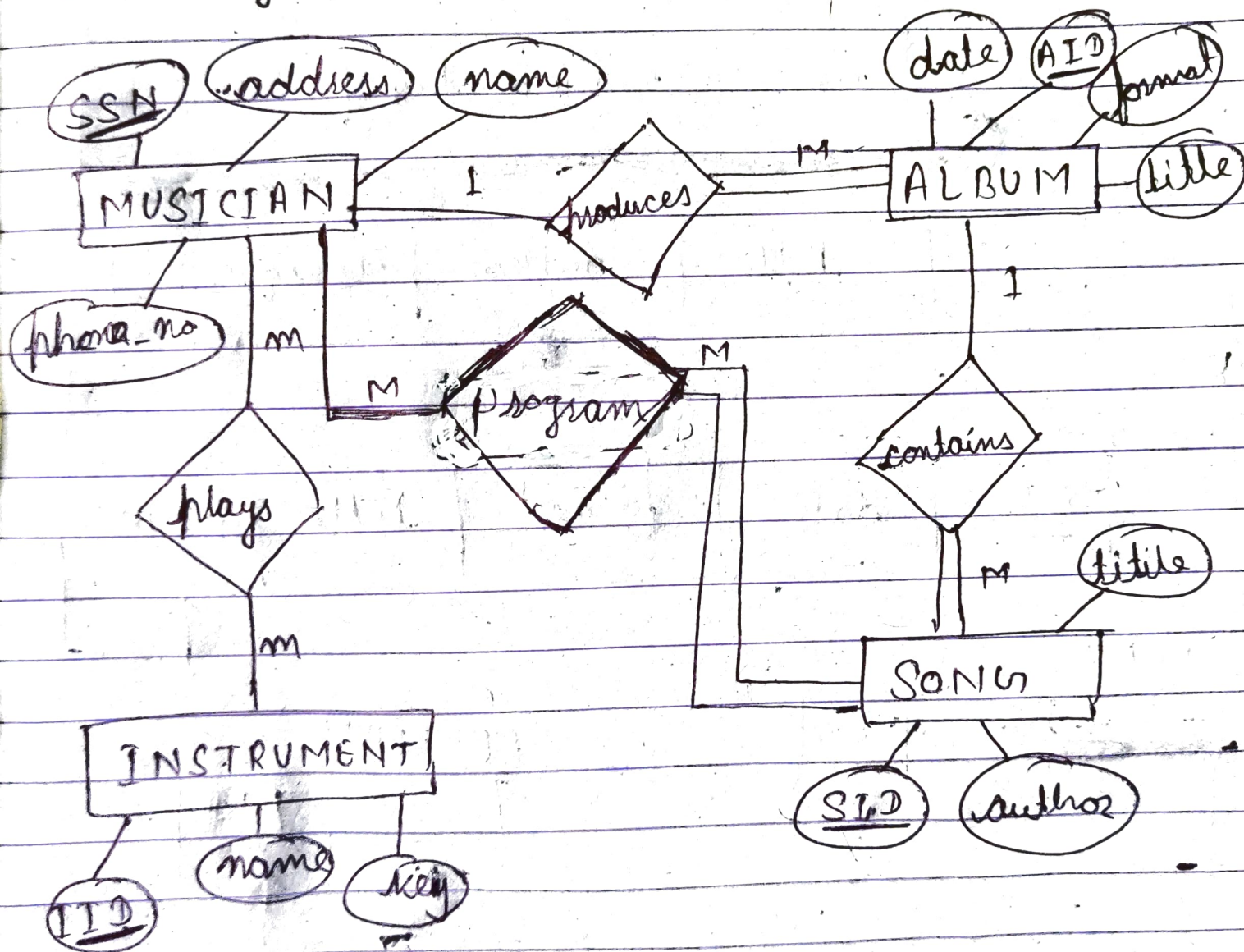
* ALBUM and SONG
appears/contains

④ Cardinality of relationship :-

- * Many to many [MUSICIAN, INSTRUMENT]
- * Many to many [MUSICIAN, SONG]
- * one to many [MUSICIAN, ALBUM]
- * one to many [ALBUM, SONG]

Step - 5 :-

* ER-Diagram



Step:- 6

① MUSICIAN

<u>SSN</u>	Name	address	Ph-no
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INSTRUMENT

<u>ID-NO</u>	name	musician-key
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SONG

<u>SID</u>	title	author	unique-no
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ALBUM

<u>AID</u>	date	format	title	SSN
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PLAY

<u>SSN</u>	<u>Id-no</u>
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PERFORM

<u>SSN</u>	<u>PIA</u>
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