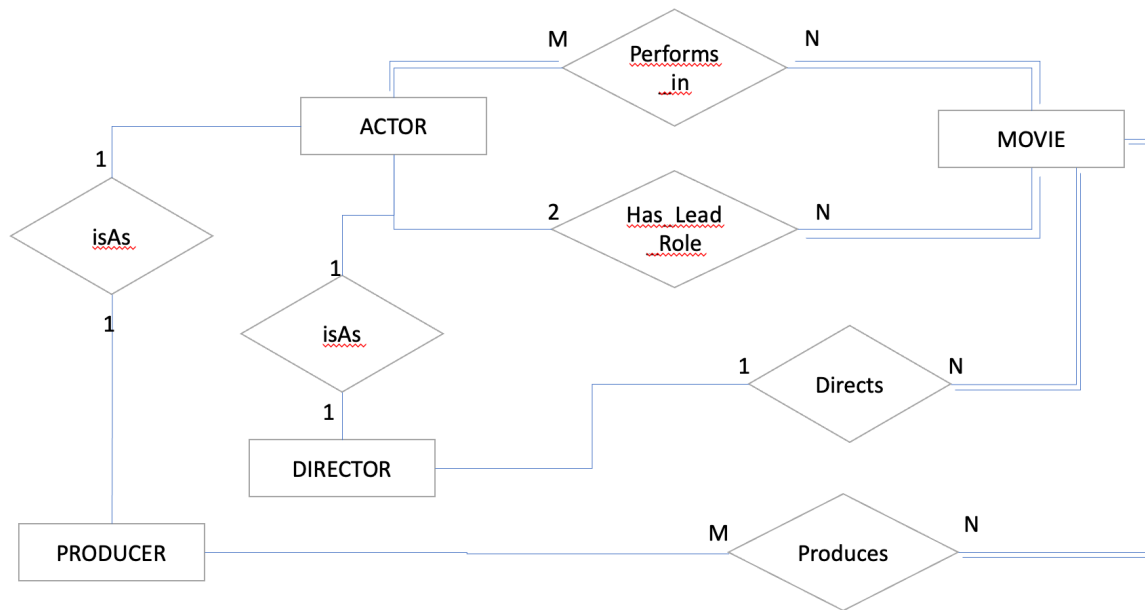


Exercise 1 Movie Database



Given the constraints shown in ER diagram above respond to the following statement with *True*, *False*, *Maybe*. Assign a response of *Maybe* to statements that are not explicitly shown to be *true*, can not be proven *False* based on the ER diagram. Discuss and explain your answer:

No	Statement	True/False/Maybe	Explain/Justify your Answer
1	There are no actors in this database that have been in no movies		
2	A movie can have only one director		
3	A movie can have one or more producers		
4	A movie should have exactly two lead actors		
5	It might be that a director has been an actor in some movie		

6	It can be that no producer has ever been an actor		
7	A producer can not be an actor in some other movie		
8	There can be movies with more than a dozen actors		
9	Some producers have been a director as well		
10	There are movies which have one director and one producer		
11	Some movies have one director but several producers		
12	There can be some actors who have done a lead role, directed a movie, and produced a movie		

Exercise 2 Mail order

Consider a MAIL_ORDER database in which employees take orders for parts from customers. The data requirements are summarized as follows:

- 1. The mail order company has employees, each identified by a unique employee number, first and last name, and Zip code.
- 2. Each customer of the company is identified by a unique customer number, first and last name, and Zip code.
- 3. Each part sold by the company is identified by a unique part number, a part name, price, and quantity in stock.
- 4. Each order placed by a customer is taken by an employee and is given a unique number. Each order contains specified quantities of one or more parts. Each order has a date of receipt as well as an expected ship date. The actual ship date is also recorded.

Design an ER (Entity-Relationship) diagram for the mail order database