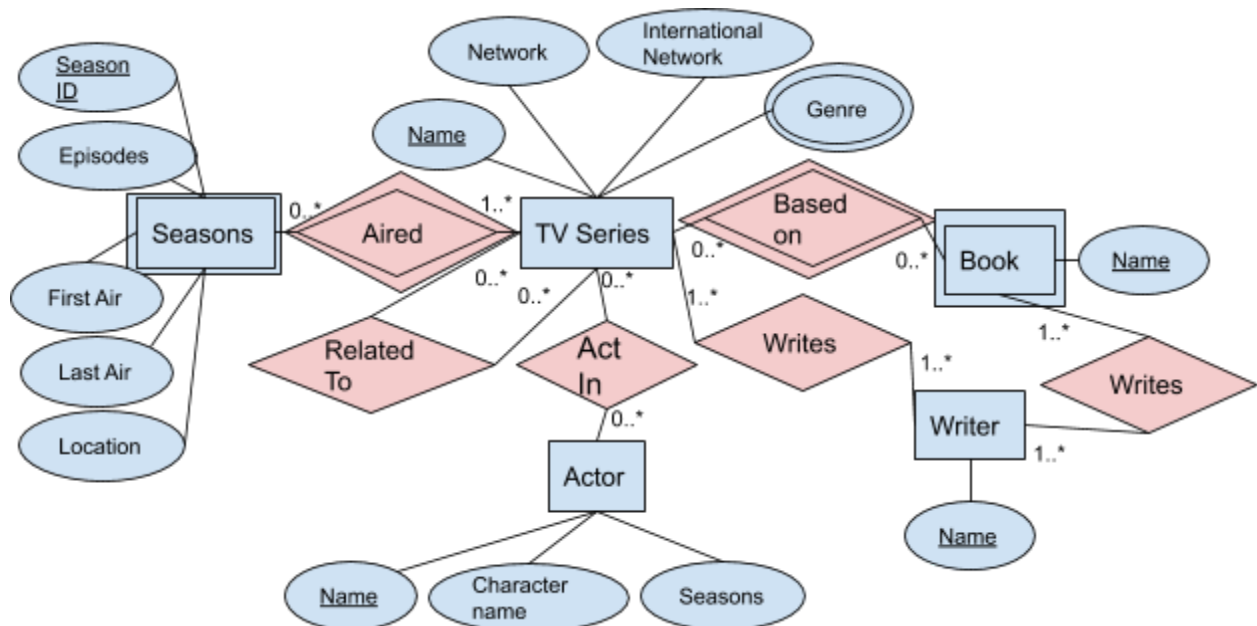
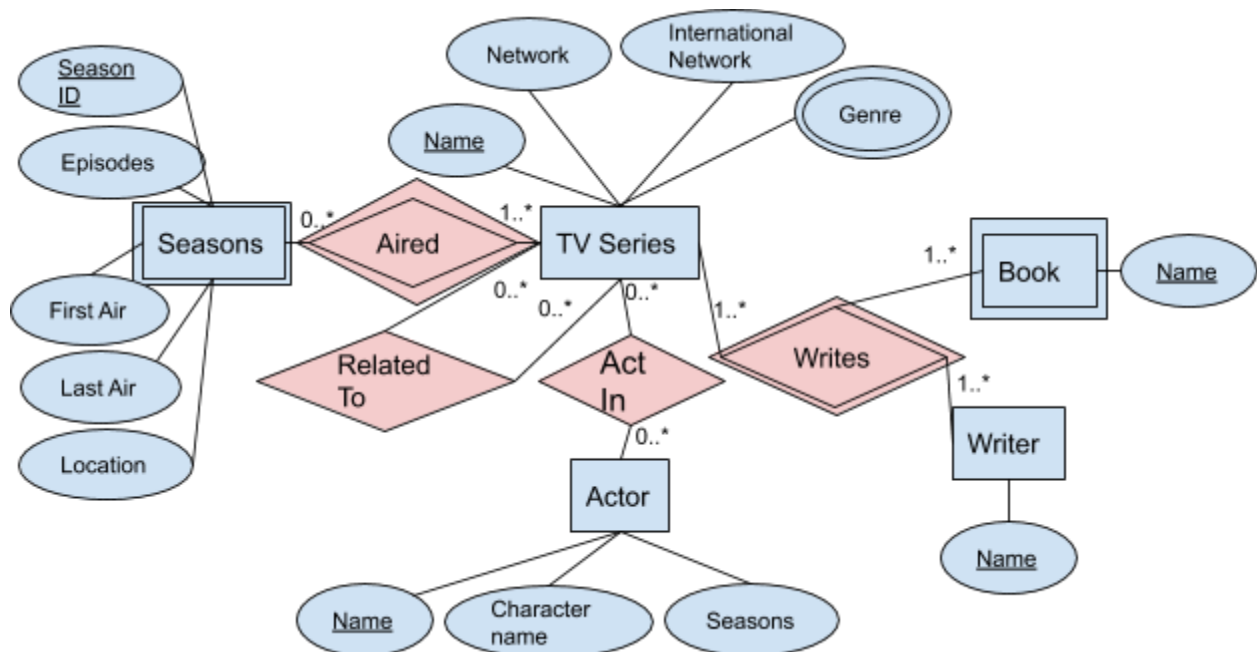


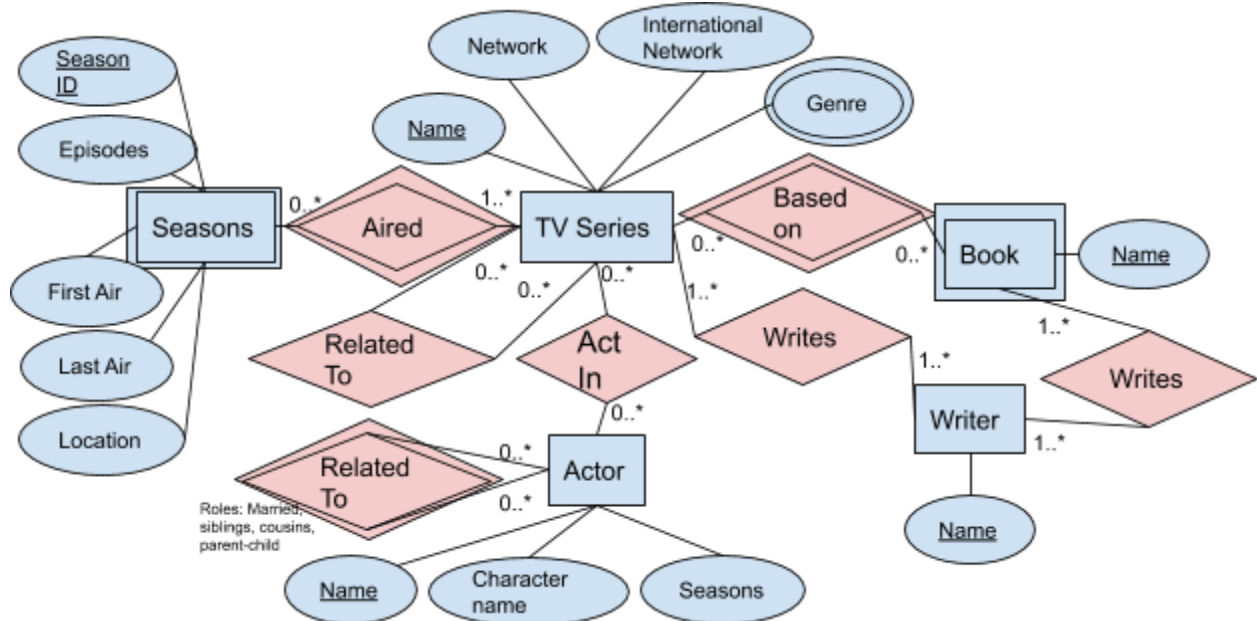
Question 1. Consider the following information about a television series. You are required to draw an ERD diagram to depict only the information included in the underlined text. Assume other entities can be added (e.g., other TV series and other actors can be added).



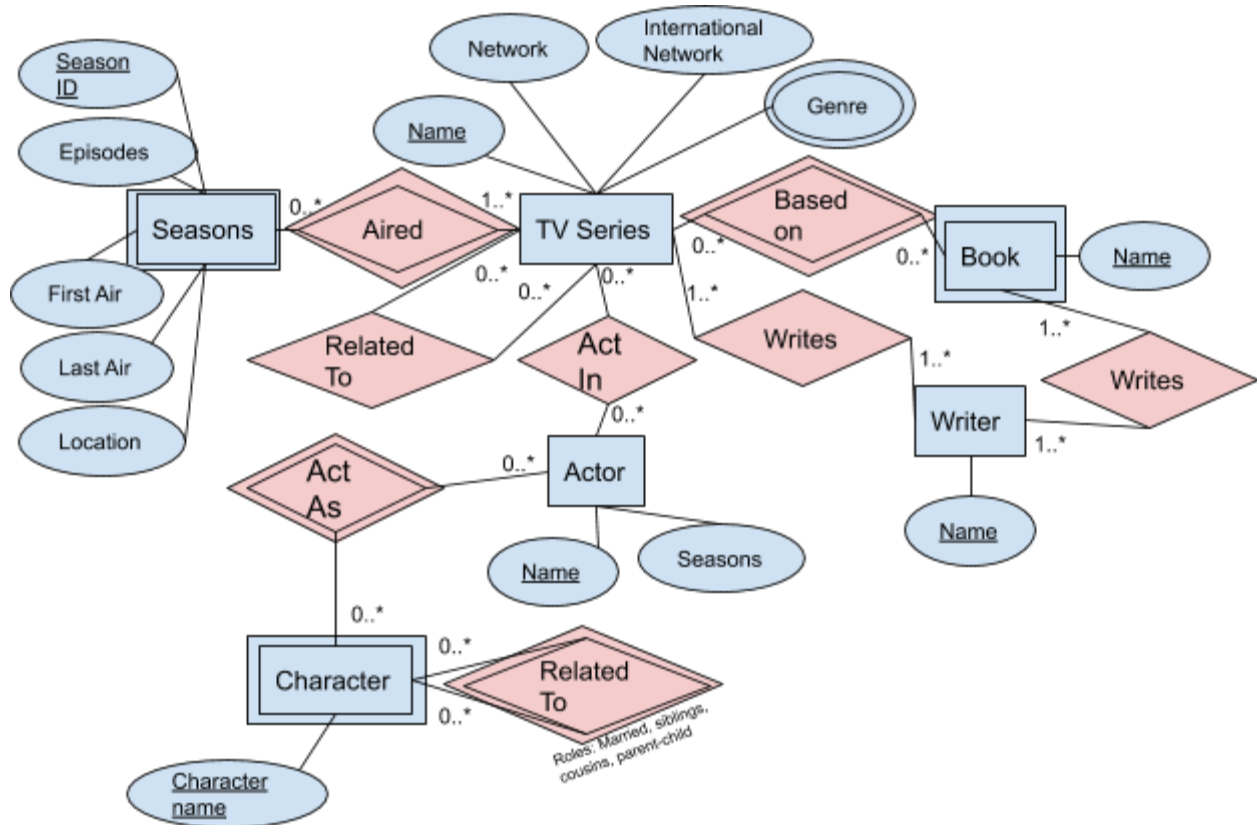
Question 2. Other TV shows may not be based on a book; one writer writes those TV shows. A writer can write books or TV show



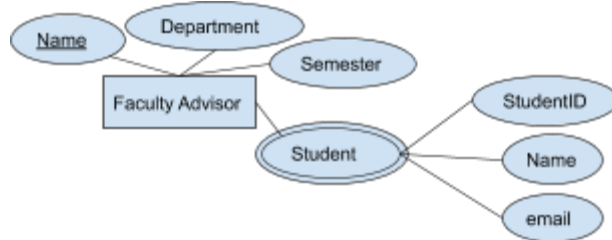
Question 3. An actor/actress can have a family relationship with another actor/actress. The type of relationship can be married, siblings, cousins, and parent-child.



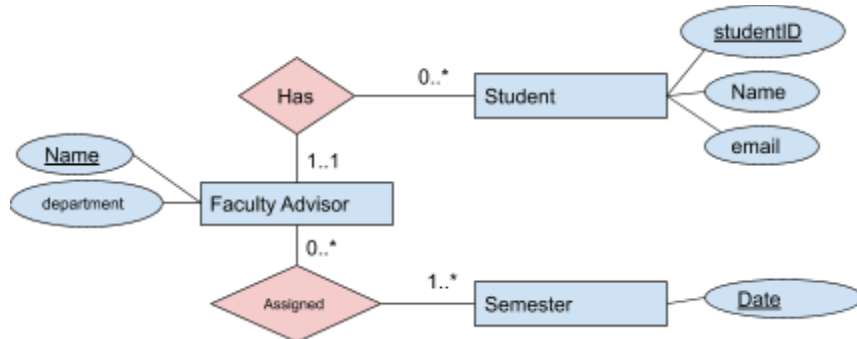
Question 4. In a TV show, an actor/actress can be related to another actor/actress. For example, in the walking dead, Andrew Lincoln is married to Sarah Wayne Callies. Also, Sonequa Martin-Green is the sister of Chad L. Coleman.



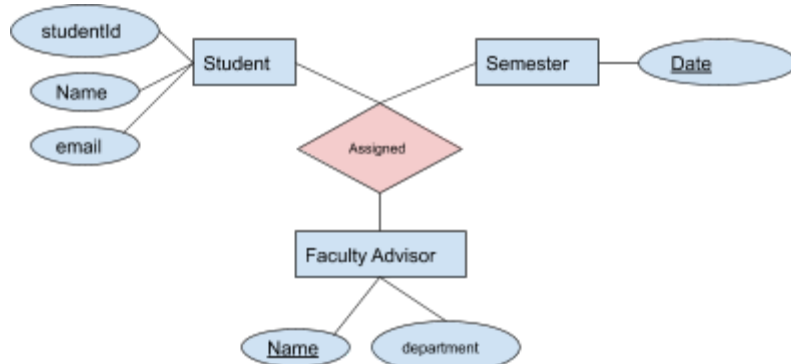
Question 5. Give an ER diagram that represents advisor information only using attributes. Do not use composite attributes.



Question 6. Give an ER diagram that represents advisor information using a relationship and relationship attributes.



Question 7. Give an ER diagram that represents advisor information using a 3-way relationship.



Question 8. Suppose a student can have multiple advisors (possibly with different assigned dates). Which of your ER diagrams in Questions 5-7 could represent this situation (possibly with a change of cardinality constraints)? You do not need to redraw the diagrams, just the list the diagrams that can be changed to represent the new situation.

Diagrams for Q6 and Q7 could be used to represent the situation.

Question 9. Create a MySQL instance in Google Cloud Platform(GCP). Create a database and a table with a schema of your choice. Insert data or upload a data set(you can check the data.gov portal for free data sets in .csv format).Run two queries on your data. Include screenshots for the results of the two queries(take the screenshots while running the queries in the cloud shell).

The screenshot shows the Google Cloud Platform interface for a MySQL instance named 'hw3'. The instance is running MySQL 5.7. The CPU utilization graph shows 0% usage over the last 30 days. The terminal window displays the following MySQL query and result:

```
mysql> Select * From Cereal;
+-----+-----+
| name      | brand |
+-----+-----+
| Raisin Bran | Kellogg |
| Cocoa Puffs | General Mills |
| Rice Krispies | Kellogg |
| Fruity Pebbles | Post |
| Frosted Flakes | Kellogg |
| Lucky Charms | General Mills |
+-----+-----+
6 rows in set (0.00 sec)
```

The screenshot shows the Google Cloud Platform interface for a MySQL instance named 'hw3'. The instance is running MySQL 5.7. The CPU utilization graph shows 0% usage over the last 30 days. The terminal window displays the following MySQL query and result:

```
mysql> Select name From Cereal Where brand = 'Kellogg';
+-----+
| name      |
+-----+
| Raisin Bran |
| Rice Krispies |
| Frosted Flakes |
+-----+
3 rows in set (0.00 sec)
```