**DASC 5333 Database Systems for Data Science  
CSCI 4333 Design of Database Systems   
Fall 2024  
Template for Homework #3**

You may have a different number of tables. Adjust accordingly.  
The relation schema (replace the example tables Author, and so on):

|  |  |
| --- | --- |
| **1** | Author (AuthorId, …, MemberId): The actual relation should replace Author. |
| Candidate Keys | [1] Table1\_Id, [2] col\_1, col\_4 |
| Foreign Keys | [1] MemberId references Member(MemberId) |
| Nullable Attributes | MemberId |
| Non-nullable Attributes | AuthorId, AuthorLName, .. |
| Notes | [1] AuthorId is created as the surrogate primary key. |
| **2** | And so on… |
| Candidate Keys |  |
| Foreign Keys |  |
| Nullable Attributes |  |
| Non-nullable Attributes |  |
| Notes | [1] You may copy, paste, or delete to adjust for the right number of relations. |
| **3** |  |
| Candidate Keys |  |
| Foreign Keys |  |
| Nullable Attributes |  |
| Non-nullable Attributes |  |
| Notes |  |
| **4** |  |
| Candidate Keys |  |
| Foreign Keys |  |
| Nullable Attributes |  |
| Non-nullable Attributes |  |
| Notes |  |
| **5** |  |
| Candidate Keys |  |
| Foreign Keys |  |
| Nullable Attributes |  |
| Non-nullable Attributes |  |
| Notes |  |
| **6** |  |
| Candidate Keys |  |
| Foreign Keys |  |
| Nullable Attributes |  |
| Non-nullable Attributes |  |
| Notes |  |
| **7** |  |
| Candidate Keys |  |
| Foreign Keys |  |
| Nullable Attributes |  |
| Non-nullable Attributes |  |
| Notes |  |
| **8** |  |
| Candidate Keys |  |
| Foreign Keys |  |
| Nullable Attributes |  |
| Non-nullable Attributes |  |
| Notes |  |
| **9** |  |
| Candidate Keys |  |
| Foreign Keys |  |
| Nullable Attributes |  |
| Non-nullable Attributes |  |
| Notes |  |
| **10** |  |
| Candidate Keys |  |
| Foreign Keys |  |
| Nullable Attributes |  |
| Non-nullable Attributes |  |
| Notes |  |
| **11** |  |
| Candidate Keys |  |
| Foreign Keys |  |
| Nullable Attributes |  |
| Non-nullable Attributes |  |
| Notes |  |
| **12** |  |
| Candidate Keys |  |
| Foreign Keys |  |
| Nullable Attributes |  |
| Non-nullable Attributes |  |
| Notes |  |
| **13** |  |
| Candidate Keys |  |
| Foreign Keys |  |
| Nullable Attributes |  |
| Non-nullable Attributes |  |
| Notes |  |
| **14** |  |
| Candidate Keys |  |
| Foreign Keys |  |
| Nullable Attributes |  |
| Non-nullable Attributes |  |
| Notes |  |
| **15** |  |
| Candidate Keys |  |
| Foreign Keys |  |
| Nullable Attributes |  |
| Non-nullable Attributes |  |
| Notes |  |
| **16** |  |
| Candidate Keys |  |
| Foreign Keys |  |
| Nullable Attributes |  |
| Non-nullable Attributes |  |
| Notes |  |
| **17** |  |
| Candidate Keys |  |
| Foreign Keys |  |
| Nullable Attributes |  |
| Non-nullable Attributes |  |
| Notes |  |
| **18** |  |
| Candidate Keys |  |
| Foreign Keys |  |
| Nullable Attributes |  |
| Non-nullable Attributes |  |
| Notes |  |