**CSC 341**

**Test 3A (Python & SQLAlchemy – no Flask)**

**5/12/2022**

**The Simpsons**

1. Write Python and SQLAlchemy code that creates a database (named simpsons\_xx.db where xx is replaced with your initials). You might want to work in a memory database until the end.
2. Include a comment with your name.
3. The database should have the following entities (and properties)
   1. Actor: id, first name, last name, birthday
   2. Character: id, first name, last name
   3. Episode: id, title, orig\_date

(Keep the database types simple strings and numbers)

1. The entities above should have the following relationships (you may need to add properties to realize the relationships)
   1. An Actor voices MANY Characters

A Character is voiced by ONE Actor

* 1. A Character appears in MANY Episodes

An Episode has MANY Characters.

1. Write some code to insert the following data (it does not have to come from a text file)
   1. Actor: Dan Castellaneta, 10/27/1957
   2. Actor: Yeardly Smith, 7/3/1964
   3. Actor: Nancy Cartwright, 10/25/1957
   4. Actor: Julie Kavner, 9/7/1950
   5. Character: Homer Simpson – voiced by Dan Castellaneta
   6. Character: Lisa Simpson – voiced by Yeardly Smith
   7. Character: Barney Gumble – voiced by Dan Castellaneta
   8. Character: Bart Simpson – voiced by Nancy Cartwright
   9. Character: Ralph Wiggum – voiced by Nancy Cartwright
   10. Character: Marge Simpson – voiced by Julie Kavner
   11. Episode: "Simpsons Roasting on an Open Fire" aired 12/17/1989
       1. Characters: Homer, Bart, Lisa, Marge
   12. Episode: "Treehouse of Horror" aired 10/25/1990
       1. Characters: Bart, Lisa, Homer, Marge
2. Write a query and display the results showing the actors and the characters they voice – no Flask just print in terminal
3. Write a query and display the results showing the first episode and the names of the actors in it

(If you were working in a memory database remember to send it to a file.)