Sean Sandlin
CS 4370 – Databases Project 1
Dr. Miller
Programmer Write-Up

For this project I implemented the join method within the Table class, and helped debug and unit test that method. This function takes in two tables and two sets of column attributes names to compare as parameters. It first checks that the number of attribute parameters are equal for each table. It then loops through the column attribute title lists for each table and saves the indexes of the parameter attributes to compare inside an integer array. Then the function checks the domains for each of the attributes it will compare for each tuple, and ensures they are equal across tables. Then using a nested loop, it cycles through all the row tuples in each table and performs an equi-join comparison on the data entries for the corresponding attribute parameter indexes placed in an array before. If those data entries are equal, the rows from each table are concatenated and placed in a new tuple array list to return as the rows of the resulting table. It then concatenates the keys from the two tables to form the resulting table's key, and returns the result table.