

ITSE 2317 – JAVA PROGRAMMING (INTERMEDIATE)

Program 10 – Books Tables

The books database consists of three tables: **Authors**, **AuthorISBN** and **Titles**.

Authors Table

The Authors table consists of three columns that maintain each author's unique ID number, first name and last name.

Column	Description
Author ID	Author's ID number in the database. In the books database, this integer column is defined as autoincremented—for each row inserted in this table, the AuthorID value is increased by 1 automatically to ensure that each row has a unique AuthorID. This column represents the table's primary key.
First Name	Author's first name (a string).
Last Name	Author's last name (a string).

AuthorISBN Table

The AuthorISBN table consists of two columns that maintain each ISBN and the corresponding author's ID number. This table associates authors with their books. Both columns are foreign keys that represent the relationship between the tables Authors and Titles—one row in table Authors may be associated with many rows in table Titles, and vice versa. The combined columns of the AuthorISBN table represent the table's primary key—thus, each row in this table must be a unique combination of an AuthorID and an ISBN.

Column	Description
Author ID	The author's ID number, a foreign key to the Authors table
ISBN	The ISBN for a book, a foreign key to the Titles table.

The Titles Table

The Titles table consists of four columns that stand for the ISBN, the Title, the Edition Number and the Copyright Year.

Column	Description
ISBN	ISBN of the book (a string). The table's primary key. ISBN is an abbreviation for "International Standard Book Number"—a numbering scheme that publishers use to give every book a unique identification number.
Title	Title of the book (a string).
Edition Number	Edition number of the book (an integer).
Copyright Year	Copyright year of the book (a string).

Entity relationship (ER) diagram for the Books Tables

