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**Assignment:** Week 12

**Program:** WK12Bandy\_SQL1.ipynb

**Description:** Notebook for textbook exercise 17.2, to select all the data in the titles table and use description and fetchall from the Cursor method to display the data in tabular format.

```
In [1]: #Import needed libraries for SQL and dataset manipulation
import sqlite3
import pandas as pd
```

```
In [2]: #Create connection with existing database file, books.db
connection = sqlite3.connect('books.db')
```

```
In [3]: #Set option
pd.options.display.max_columns = 10
```

```
In [4]: #Create cursor from the connection
cursor = connection.cursor()
```

```
In [5]: #Select statement
cursor = cursor.execute("""SELECT * FROM titles""")
```

```
In [6]: #See metadata about columns in the titles table
cursor.description
```

```
Out[6]: (('isbn', None, None, None, None, None, None),
         ('title', None, None, None, None, None, None),
         ('edition', None, None, None, None, None, None),
         ('copyright', None, None, None, None, None, None))
```

```
In [7]: #Get the data from the titles table in a tabular format
cursor.fetchall()
```

```
Out[7]: [('0135404673', 'Intro to Python for CS and DS', 1, '2020'),
         ('0132151006', 'Internet & WWW How to Program', 5, '2012'),
         ('0134743350', 'Java How to Program', 11, '2018'),
         ('0133976890', 'C How to Program', 8, '2016'),
         ('0133406954', 'Visual Basic 2012 How to Program', 6, '2014'),
         ('0134601548', 'Visual C# How to Program', 6, '2017'),
         ('0136151574', 'Visual C++ How to Program', 2, '2008'),
         ('0134448235', 'C++ How to Program', 10, '2017'),
         ('0134444302', 'Android How to Program', 3, '2017'),
         ('0134289366', 'Android 6 for Programmers', 3, '2016')]
```

```
In [8]: #Close the connection/close the database file
connection.close()
```