



NOSQL PART 1

project 1

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Part 1: SQL

Book_Code	Book_Title	Publisher	Author
22	Stranger	Vintage	Camus
13	Dreamcatcher	Scribner	King
18	Beloved	Plume	Morrison
37	Nine	LB Books	Salinger
57	Catch 22	Scribner	Heller
61	Jazz	Plume	Morrison
69	Franny	LB Books	Salinger
75	Fall	Vintage	Camus
96	Grapes	Penguin	Morrison
98	Catcher	LB Books	Salinger

❖ Normalized Tables:

- **Authors Table:**
 - AuthorName(Primary Key)
- **Publishers Table:**
 - PublisherName (Primary Key)
- **Books Table:**
 - Bookcode(Primary Key)
 - BookTitle
 - Publishername (Foreign Key referencing Publishers)
 - Authorname (Foreign Key referencing Authors)

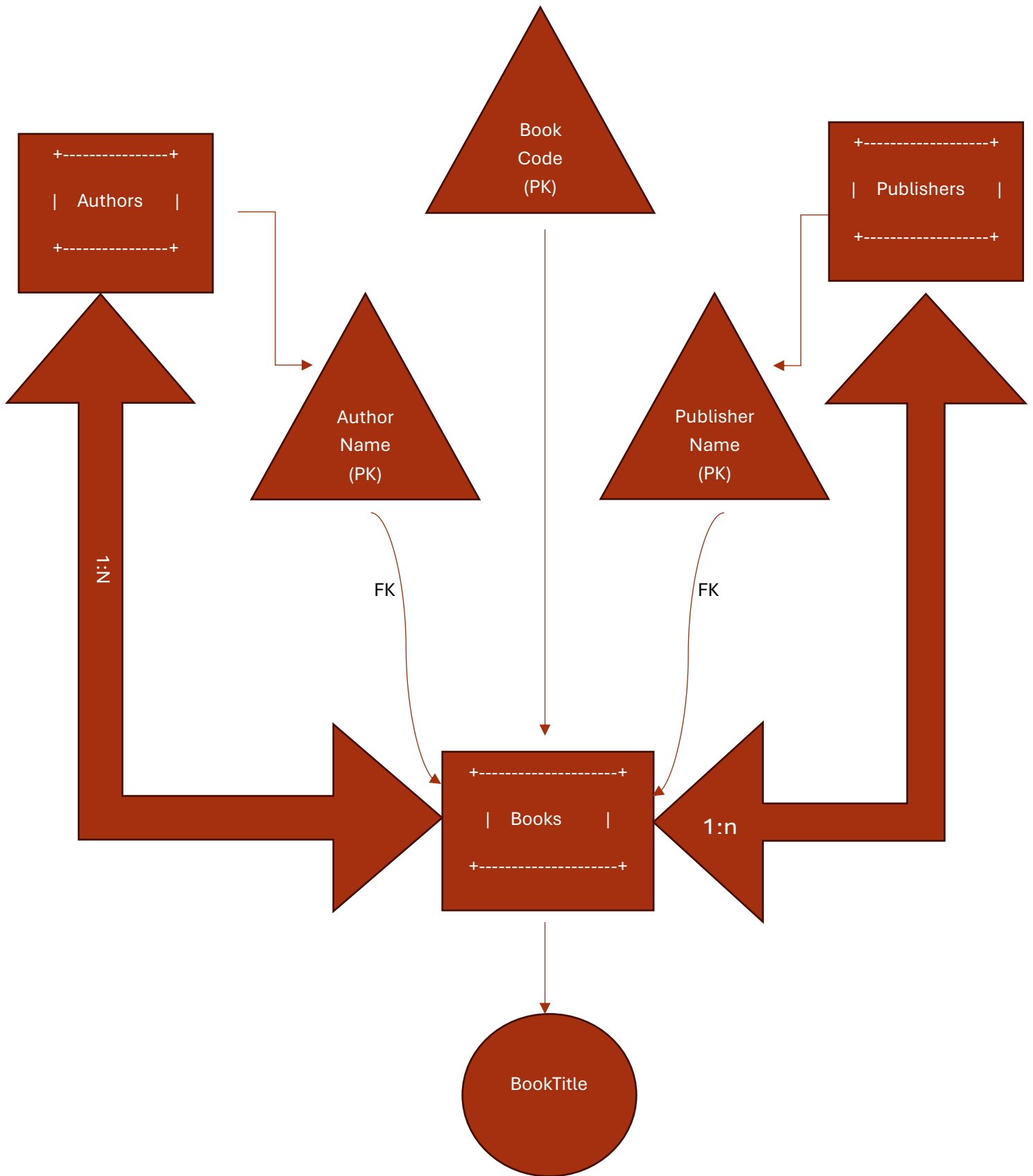
Relationships

1. Books ↔ Authors

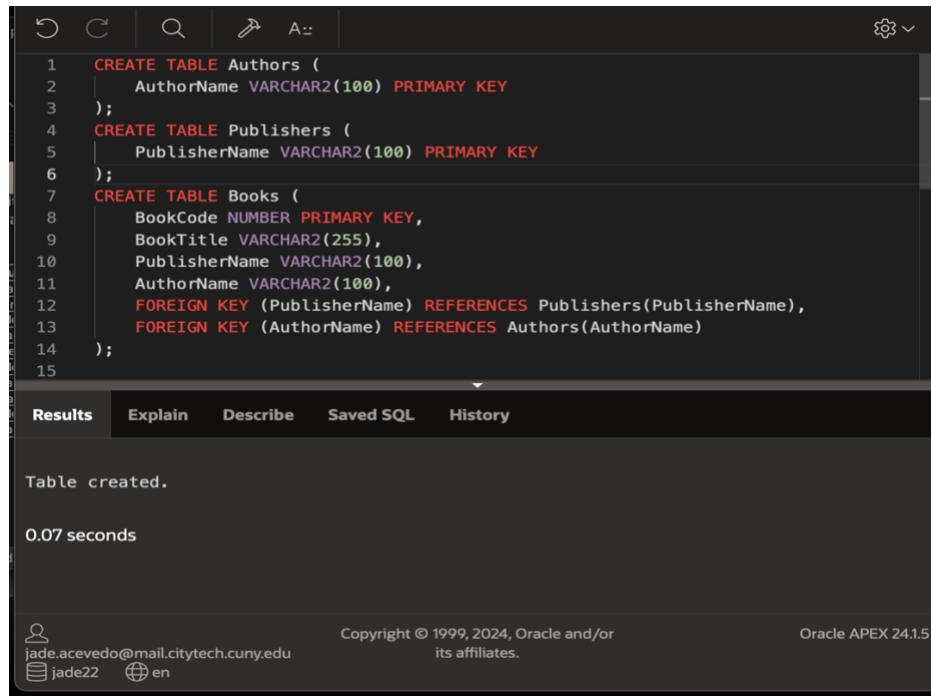
- One-to-Many: One author can write many books.

2. Books ↔ Publishers

- One-to-Many: One publisher can publish many books.



1. Use SQL code to create the tables you identified in the EER diagram



```
1 CREATE TABLE Authors (
2     AuthorName VARCHAR2(100) PRIMARY KEY
3 );
4 CREATE TABLE Publishers (
5     PublisherName VARCHAR2(100) PRIMARY KEY
6 );
7 CREATE TABLE Books (
8     BookCode NUMBER PRIMARY KEY,
9     BookTitle VARCHAR2(255),
10    PublisherName VARCHAR2(100),
11    AuthorName VARCHAR2(100),
12    FOREIGN KEY (PublisherName) REFERENCES Publishers(PublisherName),
13    FOREIGN KEY (AuthorName) REFERENCES Authors(AuthorName)
14 );
15
```

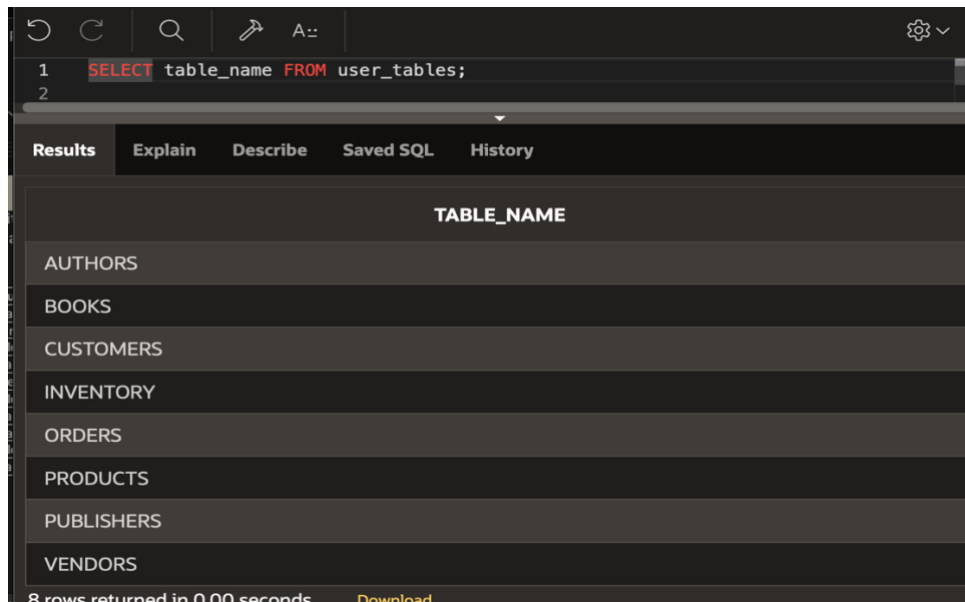
Results Explain Describe Saved SQL History

Table created.

0.07 seconds

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2. Use SQL code to show that each of the tables has been created



```
1 SELECT table_name FROM user_tables;
2
```

Results Explain Describe Saved SQL History

TABLE_NAME
AUTHORS
BOOKS
CUSTOMERS
INVENTORY
ORDERS
PRODUCTS
PUBLISHERS
VENDORS

8 rows returned in 0.00 seconds Download

3. Use SQL code to enter the information displayed in Table 1 into the tables you created

```
1  INSERT INTO Books (BookCode, BookTitle, PublisherName, AuthorName)
2  VALUES (22, 'Stranger', 'Vintage', 'Camus');
3  INSERT INTO Books (BookCode, BookTitle, PublisherName, AuthorName)
4  VALUES (13, 'Dreamcatcher', 'Scribner', 'King');
5  INSERT INTO Books (BookCode, BookTitle, PublisherName, AuthorName)
6  VALUES (18, 'Beloved', 'Plume', 'Morrison');
7  INSERT INTO Books (BookCode, BookTitle, PublisherName, AuthorName)
8  VALUES (37, 'Nine', 'LB Books', 'Salinger');
9  INSERT INTO Books (BookCode, BookTitle, PublisherName, AuthorName)
10 VALUES (57, 'Catch 22', 'Scribner', 'Heller');
11 INSERT INTO Books (BookCode, BookTitle, PublisherName, AuthorName)
12 VALUES (61, 'Jazz', 'Plume', 'Morrison');
13 INSERT INTO Books (BookCode, BookTitle, PublisherName, AuthorName)
14 VALUES (69, 'Franny', 'LB Books', 'Salinger');
15 INSERT INTO Books (BookCode, BookTitle, PublisherName, AuthorName)
16 VALUES (75, 'Fall', 'Vintage', 'Camus');
17 INSERT INTO Books (BookCode, BookTitle, PublisherName, AuthorName)
18 VALUES (96, 'Grapes', 'Penguin', 'Morrison');
19 INSERT INTO Books (BookCode, BookTitle, PublisherName, AuthorName)
20 VALUES (98, 'Catcher', 'LB Books', 'Salinger');
```

```
1  INSERT INTO Authors (AuthorName) VALUES ('Camus');
2  INSERT INTO Authors (AuthorName) VALUES ('King');
3  INSERT INTO Authors (AuthorName) VALUES ('Morrison');
4  INSERT INTO Authors (AuthorName) VALUES ('Salinger');
5  INSERT INTO Authors (AuthorName) VALUES ('Heller');
```

```
1  INSERT INTO Publishers (PublisherName) VALUES ('Vintage');
2  INSERT INTO Publishers (PublisherName) VALUES ('Scribner');
3  INSERT INTO Publishers (PublisherName) VALUES ('Plume');
4  INSERT INTO Publishers (PublisherName) VALUES ('LB Books');
5  INSERT INTO Publishers (PublisherName) VALUES ('Penguin');
6  |
```

4. Use SQL code to show that the information has been entered into the appropriate tables

↑ SQL Commands

Schema WKSP_JADE22

Language SQL Rows 10

Clear Command Find Tables

Save Run

1 SELECT * FROM Authors;
2

Results Explain Describe Saved SQL History

AUTHORNAME

Camus
Heller
King
Morrison
Salinger

5 rows returned in 0.01 seconds Download

↑ SQL Commands

Schema WKSP_JADE22

Language SQL Rows 10

Clear Command Find Tables

Save Run

1 SELECT * FROM Books;
2

Results Explain Describe Saved SQL History

BOOKCODE	BOOKTITLE	PUBLISHERNAME	AUTHORNAME
18	Beloved	Plume	Morrison
37	Nine	LB Books	Salinger
69	Franny	LB Books	Salinger
57	Catch 22	Scribner	Heller
96	Grapes	Penguin	Morrison
13	Dreamcatcher	Scribner	King
75	Fall	Vintage	Camus
98	Catcher	LB Books	Salinger
61	Jazz	Plume	Morrison
22	Stranger	Vintage	Camus

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SQL Commands

Schema WKSP_JADE22

Language SQL

Rows 10

Save

Run

Clear Command

Find Tables

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1 SELECT * FROM Publishers;

2 |

Results

Explain

Describe Explain

Saved SQL

History

PUBLISHERNAME

LB Books

Penguin

Plume

Scribner

Vintage

5 rows returned in 0.01 seconds

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5. Run the following queries:

- a. For each author name, show the book title. Your output should include author name and book title. Order the output by author name in descending order

SQL Commands

Schema WKSP_JADE22

Language SQL

Rows 10

Clear Command

Find Tables

Save

Run

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1 SELECT AuthorName, BookTitle, BookCode

2 FROM Books

3 ORDER BY AuthorName DESC;

4

Results

Explain

Describe

Saved SQL

History

AUTHORNAME	BOOKTITLE	BOOKCODE
Salinger	Catcher	98
Salinger	Nine	37
Salinger	Franny	69
Morrison	Beloved	18
Morrison	Grapes	96
Morrison	Jazz	61
King	Dreamcatcher	13
Heller	Catch 22	57
Camus	Fall	75
Camus	Stranger	22

10 rows returned in 0.05 seconds

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- b. For each publisher, show the books they have published. Your output should include publisher name and book title. Order the output by publisher name in ascending order.

SQL Commands

Schema: WKSP_JADE22

Language: SQL Rows: 10

Clear Command Find Tables

Save Run

```
1 SELECT PublisherName, BookTitle, BookCode
2 FROM Books
3 ORDER BY PublisherName ASC;
4
```

Results Explain Describe Saved SQL History

PUBLISHERNAME	BOOKTITLE	BOOKCODE
LB Books	Catcher	98
LB Books	Nine	37
LB Books	Franny	69
Penguin	Grapes	96
Plume	Beloved	18
Plume	Jazz	61
Scribner	Dreamcatcher	13
Scribner	Catch 22	57
Vintage	Stranger	22
Vintage	Fall	75

10 rows returned in 0.00 seconds Download

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- c. For each author, show the publisher who has published his work. Your output should include the author's name and the publisher's name. Order the output by author's name in ascending order.

SQL Commands

Schema: WKSP_JADE22

Language: SQL Rows: 10

Clear Command Find Tables

Save Run

```
1 SELECT AuthorName, PublisherName, BookCode
2 FROM Books
3 ORDER BY AuthorName ASC;
4
```

Results Explain Describe Saved SQL History

AUTHORNAME	PUBLISHERNAME	BOOKCODE
Camus	Vintage	22
Camus	Vintage	75
Heller	Scribner	57
King	Scribner	13
Morrison	Plume	18
Morrison	Penguin	96
Morrison	Plume	61
Salinger	LB Books	98
Salinger	LB Books	37
Salinger	LB Books	69

10 rows returned in 0.01 seconds Download

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d. List the title of all the books which Salinger has written.

The screenshot shows the SQL Developer interface with the following components:

- SQL Commands Panel:** Contains the query:

```
1 SELECT BookTitle, BookCode
2 FROM Books
3 WHERE AuthorName = 'Salinger';
4
```
- Schema:** WKSP_JADE22
- Language:** SQL
- Rows:** 10
- Buttons:** Clear Command, Find Tables, Save, Run
- Results Panel:** Shows the query results in a table with columns BOOKTITLE and BOOKCODE.

BOOKTITLE	BOOKCODE
Nine	37
Franny	69
Catcher	98

3 rows returned in 0.00 seconds [Download](#)

e. List the title of all the books published by publisher Vintage

The screenshot shows the SQL Developer interface with the following components:

- SQL Commands Panel:** Contains the query:

```
1 SELECT BookTitle, BookCode
2 FROM Books
3 WHERE PublisherName = 'Vintage';
4
```
- Schema:** WKSP_JADE22
- Language:** SQL
- Rows:** 10
- Buttons:** Clear Command, Find Tables, Save, Run
- Results Panel:** Shows the query results in a table with columns BOOKTITLE and BOOKCODE.

BOOKTITLE	BOOKCODE
Fall	75
Stranger	22

2 rows returned in 0.00 seconds [Download](#)

- f. List the title of all the books and the publisher's name for all books published by Vintage, LB Books or Plume (use IN)

The screenshot shows a SQL IDE interface with the following components:

- SQL Commands** tab: The query editor contains the following SQL code:

```
1 SELECT BookTitle, BookCode, PublisherName
2 FROM Books
3 WHERE PublisherName IN ('Vintage', 'LB Books', 'Plume');
4
```
- Schema**: WKSP_JADE22
- Language**: SQL
- Rows**: 10
- Buttons**: Clear Command, Find Tables, Save, Run
- Results** tab: The results are displayed in a table with the following data:

BOOKTITLE	BOOKCODE	PUBLISHERNAME
Beloved	18	Plume
Nine	37	LB Books
Franny	69	LB Books
Fall	75	Vintage
Catcher	98	LB Books
Jazz	61	Plume
Stranger	22	Vintage
- Footer**: 7 rows returned in 0.00 seconds, Download

- g. List the title of the books and the publisher name for all books published by Scribner or Plume (use OR) *****NOTE: you should only have four lines of output**

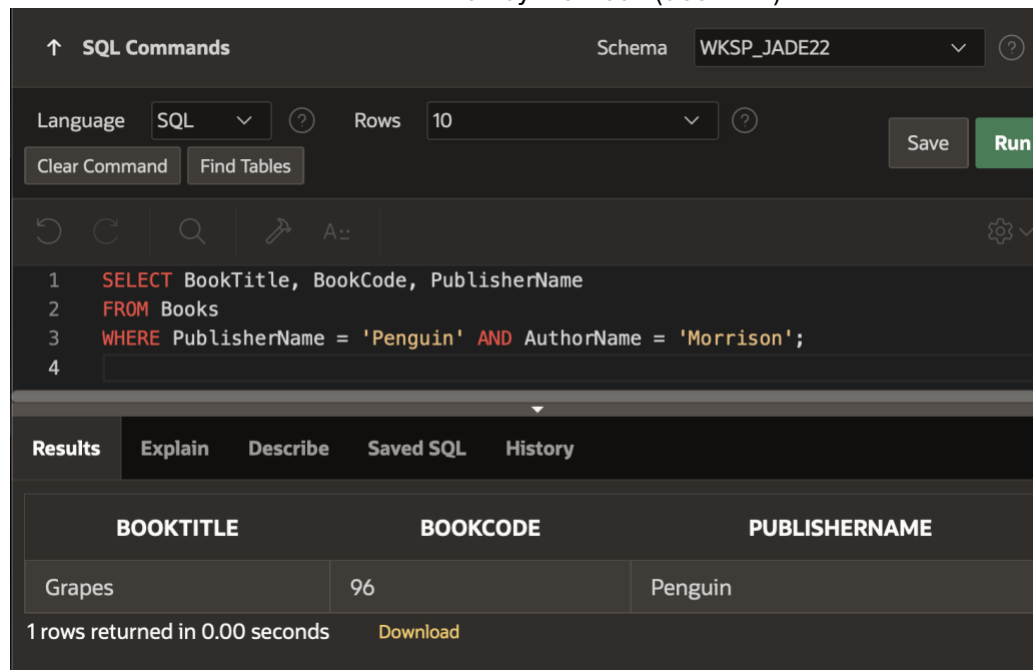
The screenshot shows a SQL IDE interface with the following components:

- SQL Commands** tab: The query editor contains the following SQL code:

```
1 SELECT BookTitle, BookCode, PublisherName
2 FROM Books
3 WHERE PublisherName = 'Scribner' OR PublisherName = 'Plume';
4
```
- Schema**: WKSP_JADE22
- Language**: SQL
- Rows**: 10
- Buttons**: Clear Command, Find Tables, Save, Run
- Results** tab: The results are displayed in a table with the following data:

BOOKTITLE	BOOKCODE	PUBLISHERNAME
Beloved	18	Plume
Catch 22	57	Scribner
Dreamcatcher	13	Scribner
Jazz	61	Plume
- Footer**: 4 rows returned in 0.00 seconds, Download

- h. List the title of the book and the publisher name for all books published by Penguin and written by Morrison (use AND)



The screenshot shows a SQL IDE interface. At the top, the 'SQL Commands' tab is active, with the schema 'WKSP_JADE22' selected. The language is set to 'SQL' and the number of rows to display is '10'. Below the command area, there are buttons for 'Clear Command', 'Find Tables', 'Save', and 'Run'. The SQL query is as follows:

```
1 SELECT BookTitle, BookCode, PublisherName
2 FROM Books
3 WHERE PublisherName = 'Penguin' AND AuthorName = 'Morrison';
4
```

Below the query editor, the 'Results' tab is active, showing a table with the following data:

BOOKTITLE	BOOKCODE	PUBLISHERNAME
Grapes	96	Penguin

At the bottom of the results section, it states '1 rows returned in 0.00 seconds' and provides a 'Download' link.