



Function: Search by Title

Inputs: @Title

Outputs: ID, Title, Year, Pages, Language

Pseudocode:

Connect to database

Query = SELECT b.ID, b.Title, b.Year, b.Pages, b.Language, b.Description,
b.No_copies

FROM Book as b

WHERE b.Title = @Title

Parse Query

Execute Query

Close connection to the database

Function: Search by Author

Inputs: @AuthorID

Outputs: ID, Title, Year, Pages, Language

Pseudocode:

Connect to database

Query = SELECT b.ID, b.Title, b.Year, b.Pages, b.Language, b.Description,
b.No_copies

FROM Book as b, Author as a, Writes as w
WHERE a.AuthorID = @AuthorID AND w.AuthorID = a.AuthorID AND w.BookID
= b.BookID

Parse Query

Execute Query

Close connection to the database

Function: Search by Series

Inputs: @Series_name

Outputs: ID, Title, Year, Pages, Language

Pseudocode:

Connect to database

Query = SELECT b.ID, b.Title, b.Year, b.Pages, b.Language, b.Description,
b.No_copies

FROM Series as s, Part_of as p, Book as b
WHERE s.Series_name = @Series_name AND p.Series_name = s.Series_name
AND p.BookID = b.bookID

Parse Query

Execute Query

Close connection to the database

Function: Search by Publisher

Inputs: @PublisherID

Outputs: ID, Title, Year, Pages, Language

Pseudocode:

Connect to database

Query = SELECT b.ID, b.Title, b.Year, b.Pages, b.Language, b.Description,
b.No_copies

FROM Publisher as p1, Publishes as p2, Book as b
WHERE p1.PublisherID = @PublisherID AND p2.PublisherID = p1.PublisherID
AND p2.BookID = b.BookID

Parse Query

Execute Query

Close connection to the database

Function: View Books

Inputs: None

Outputs: ID, Title, Year, Pages, Language

Pseudocode:

Connect to database

Query = SELECT b.ID, b.Title, b.Year, b.Pages, b.Language, b.Description,
b.No_copies

FROM Book as b

Parse Query

Execute Query
Close connection to the database

Function: Edit Book

Inputs: @BookID, @Title, @Description, @No_copies

Outputs: None

Pseudocode:

Connect to database

Query = UPDATE Book

SET "attribute"

WHERE (BookID = @BookID) AND (Title = @Title) AND (Description = @Description) AND (No_copies = @No_copies);

Parse Query

Execute Query

Close connection to the database

Function: Save Book

Inputs: @BookID, @Title, @Year, @Pages, @Description, @Language, @No_copies

Outputs: None

Pseudocode:

Connect to database

Query = INSERT INTO Book(@BookID, @Title, @Year, @Pages, @Description, @Language, @No_copies);

Parse Query

Execute Query

Close connection to the database

Function: View Users

Inputs: None

Outputs: UserID, Name, Books_withdrawn, Requested_books

Pseudocode:

Connect to database

Query = SELECT u.UserID, u.Name, u.Books_withdrawn, u.Requested_books
FROM Users as u

Parse Query

Execute Query

Close connection to the database

Function: Edit User

Inputs: @UserID, @Name, @Books_withdrawn, @Requested_books

Outputs: None

Pseudocode:

Connect to database

Query = UPDATE User

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        SET "attribute"  
        WHERE (UserID = @UserID) AND (Name = @Name) AND (Books_withdrawn =  
                @Books_withdrawn) AND (Requested_books =  
@Requested_books);  
Parse Query  
Execute Query  
Close connection to the database
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Function: Save User

Inputs: @UserID, @Name, @Books_withdrawn, @Requested_books

Outputs: None

Pseudocode:

Connect to database

Query = INSERT INTO User(@UserID, @Name, @Books_withdrawn,
@Requested_books);

Parse Query

Execute Query

Close connection to the database