PostgreSQL Assignment 1

# Create a schema called Library

# -- Create authors table

CREATE TABLE IF NOT EXISTS authors (

id SERIAL PRIMARY KEY,

name VARCHAR(255) NOT NULL,

birthdate DATE

);

# -- Create books table with a foreign key

CREATE TABLE IF NOT EXISTS books (

id SERIAL PRIMARY KEY,

title VARCHAR(255) NOT NULL,

author\_id INT REFERENCES authors(id),

published\_date DATE,

isbn VARCHAR(13),

pages INT,

language VARCHAR(50)

);

# Insert values to the table

INSERT INTO authors (name, birthdate) VALUES

('George Orwell', '1903-06-25'),

('J.K. Rowling', '1965-07-31'),

('Isaac Asimov', '1920-01-02'),

('Arthur Conan Doyle', '1859-05-22'),

('Agatha Christie', '1890-09-15'),

('J.R.R. Tolkien', '1892-01-03'),

('Stephen King', '1947-09-21'),

('Mark Twain', '1835-11-30'),

('Ernest Hemingway', '1899-07-21'),

('F. Scott Fitzgerald', '1896-09-24');

INSERT INTO books (title, author\_id, published\_date, isbn, pages, language) VALUES

('1984', 1, '1949-06-08', '1234567890123', 328, 'English'),

('Animal Farm', 1, '1945-08-17', '1234567890124', 112, 'English'),

('Harry Potter and the Philosophers Stone', 2, '1997-06-26', '1234567890125', 223, 'English'),

('Foundation', 3, '1951-06-01', '1234567890126', 255, 'English'),

('Sherlock Holmes', 4, '1887-03-15', '1234567890127', 307, 'English'),

('Murder on the Orient Express', 5, '1934-01-01', '1234567890128', 256, 'English'),

('The Hobbit', 6, '1937-09-21', '1234567890129', 310, 'English'),

('The Shining', 7, '1977-01-28', '1234567890130', 447, 'English'),

('Adventures of Huckleberry Finn', 8, '1884-12-10', '1234567890131', 366, 'English'),

('The Old Man and the Sea', 9, '1952-09-01', '1234567890132', 127, 'English');

# Create SQL Queries to retrieve the data for the following requirements

1. Fetch the first 5 books.
2. Fetch the first 3 books sorted by published\_date.
3. Fetch the first 2 authors sorted by birthdate.
4. Select books with id in 1,2,3
5. Select Authors who were born after the year 1940
6. Display book details that have pages more than 300
7. Display books published between the year1930 to 1940
8. Select books with titles starting with "Harry".
9. Select books with titles containing the word "Game".
10. Select books where the published\_date is null.
11. Query to get the age of each book since its publication date.
12. Display the publication date in 'Month DD, YYYY' format
13. Display the book details sorted by their pages
14. Alter the table books to add a column genre.
15. Update the books table with the appropriate genre for each book