SQL Test Paper (Intermediate Level)

Instructions:

1. Create the required table(s) and populate them with the data provided.
2. Perform the queries as per the questions.
3. Provide screenshots of your code and outputs as answers.

Scenario:

A database for a **Bookstore** is to be created. The table structure is provided below:

Table: books

COLUMN NAME	DATA TYPE	DESCRIPTION
book_id	INT (Primary Key)	Unique ID for each book
title	VARCHAR(100)	Title of the book
author	VARCHAR(50)	Author of the book
genre	VARCHAR(30)	Genre of the book (e.g., Fiction)
price	DECIMAL(6, 2)	Price of the book in INR
stock	INT	Number of copies available

Sample Data:

BOOK_ID	TITLE	AUTHOR	GENRE	PRICE	STOCK
1	The Alchemist	Paulo Coelho	Fiction	350.50	10
2	Atomic Habits	James Clear	Self-help	499.99	5
3	Sapiens	Yuval Noah Harari	History	899.00	3
4	Wings of Fire	A.P.J. Abdul Kalam	Biography	250.00	20
5	The Great Gatsby	F. Scott Fitzgerald	Fiction	300.00	12
6	Deep Work	Cal Newport	Productivity	400.75	8
7	Ikigai	Francesc Miralles	Self-help	450.00	15
8	The Monk Who Sold His Ferrari	Robin Sharma	Motivation	299.99	6

Questions:

1. **Table Creation and Insertion**

   - Create the books table as per the structure provided above.
   - Insert the sample data into the table.

2. **Query to Fetch Records**

   Write a query to fetch all the books that have a price greater than 500 and stock greater than 5.

3. **Filtering Based on Genre**

   Write a query to display the title and author of all books belonging to the "Self-help" genre.

4. **Stock Analysis**

   Write a query to find books with a stock less than 10 and order them by price in descending order.

5. **Aggregation**

   Write a query to calculate the total number of books available across all genres.

6. **Grouping and Counting**

   Write a query to display the number of books available for each genre.

7. **Updating Prices**

   Increase the price of all "Fiction" genre books by 10%. Write the query to perform the update and display the updated records.

8. **Finding Most Expensive Book**

   Write a query to find the most expensive book and display its title, author, and price.

9. **Book Search**

   Write a query to search for books with titles containing the word "The" (case-insensitive).

10. **Joining Another Table**

    Add another table authors with the following structure:

Column Name	Data Type	Description
author_id	INT (Primary Key)	Unique ID for each author
author_name	VARCHAR(50)	Full name of the author
country	VARCHAR(30)	Author's country of origin

Sample Data:

author_id	author_name	country
1	Paulo Coelho	Brazil
2	James Clear	USA
3	Yuval Noah Harari	Israel
4	A.P.J. Abdul Kalam	India
5	F. Scott Fitzgerald	USA
6	Cal Newport	USA
7	Francesc Miralles	Spain
8	Robin Sharma	Canada
9	Daniel Kahneman	USA
10	Robert Kiyosaki	USA

Write a query to join the books table with the authors table and display the book title, author's name, and country.