1. Add a new column called DOB in Persons table with data type as Date.

```
1      -- Q1
2 •    ALTER TABLE Persons
3      ADD DOB DATE;
4 •    desc persons;
```

Field	Type	Null	Key	Default	Extra
Id	int	NO	PRI	NULL	
Fname	varchar(50)	YES		NULL	
Lname	varchar(50)	YES		NULL	
Population	int	YES		NULL	
Rating	decimal(3,2)	YES		NULL	
Country_Id	int	YES		NULL	
Country_name	varchar(50)	YES		NULL	
DOB	date	YES		NULL	

2. Write a user-defined function to calculate age using DOB.

```
8      -- Q2
9      DELIMITER &&
10 •   CREATE FUNCTION CalculateAge(dob DATE)
11     RETURNS INT
12     DETERMINISTIC
13     BEGIN
14         DECLARE age INT;
15         SET age = TIMESTAMPDIFF(YEAR, dob, CURDATE());
16         RETURN age;
17     END &&
18     DELIMITER ;
19
20 •   SELECT Fname,CalculateAge(dob) AS age FROM Persons;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Fname	age
John	34
Jane	36
Mike	32
Emma	39
Liam	30
Olivia	37

3. Write a select query to fetch the Age of all persons using the function that has been created.

```
22      -- Q3
23 •    SELECT ID,Fname,dob,CalculateAge(dob) AS age FROM Persons;
24
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

ID	Fname	dob	age
1	John	1990-01-15	34
2	Jane	1988-07-20	36
3	Mike	1992-03-12	32
4	Emma	1985-10-22	39
5	Liam	1994-11-01	30
6	Olivia	1987-06-14	37
7	Ava	1991-04-09	33
8	William	1989-09-29	35
9	Sophia	1993-02-19	31
10	James	1986-05-27	38
11	Chris	1995-08-18	29
12	Taylor	1984-12-24	39
13	Carol	1990-07-07	34

4. Find the length of each country name in the Country table.

```
25      -- Q4
26 •    SELECT *,length(country_name) AS countrynamelenght From country
27
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Id	Country_name	Population	Area	countrynamelenght
1	USA	331000000	9834000.00	3
2	Canada	38000000	9985000.00	6
3	UK	67000000	243610.00	2
4	Australia	25600000	7692000.00	9
5	India	1380000000	3287000.00	5
6	China	1440000000	9597000.00	5
7	Japan	125800000	377975.00	5
8	Brazil	212600000	8516000.00	6
9	Germany	83020000	357386.00	7
10	France	67000000	551695.00	6

5. Extract the first three characters of each country's name in the Country table.

```
28      -- Q5
29 •    SELECT *, LEFT(country_name,3) As Three FROM Country;
30
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Id	Country_name	Population	Area	Three
1	USA	331000000	9834000.00	USA
2	Canada	38000000	9985000.00	Can
3	UK	67000000	243610.00	UK
4	Australia	25600000	7692000.00	Aus
5	India	1380000000	3287000.00	Ind
6	China	1440000000	9597000.00	Chi
7	Japan	125800000	377975.00	Jap
8	Brazil	212600000	8516000.00	Bra
9	Germany	83020000	357386.00	Ger

6. Convert all country names to uppercase and lowercase in the Country table.

```
31      -- Q6
32 •    SELECT country_name,lower(country_name) AS LOWER,upper(country_name) AS UPPER FROM Country;
33
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

country_name	LOWER	UPPER
USA	usa	USA
Canada	canada	CANADA
UK	uk	UK
Australia	australia	AUSTRALIA
India	india	INDIA
China	china	CHINA
Japan	japan	JAPAN
Brazil	brazil	BRAZIL
Germany	germany	GERMANY
France	france	FRANCE