Functions

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                                                         • | 🏂 | 🍼 Q 🕦 🖘
         ADD DOB DATE:
         ## Write a user-defined function to calculate age using Dob
  9 • CREATE FUNCTION CalculateAge(dob DATE)
 10
         RETURNS INT
 11
         DETERMINISTIC
 12

○ BEGIN

             DECLARE age INT;
 13
             SET age = YEAR(CURDATE()) - YEAR(dob);
 14
            IF (MONTH(CURDATE()) < MONTH(dob)) OR (MONTH(CURDATE()) = MONTH(dob) AND DAY(CURDATE()) < DAY(dob)) THEN
 15
  16
                SET age = age - 1;
           END IF;
            RETURN age;
 19
        END; //
 20
 21
         DELIMITER;
 22
Output ::
Action Output
  # | Time | Action | 1 22:23:24 | ALTER TABLE Persons ADD DOB DATE
                                                                                                      0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0
                                                                                                                                                                                             0.016 sec
                                                                                                      Error Code: 1064. You have an error in your SQL syntax; check the manual that corresponds to your MySQL server ... 0.016 sec
2 22:24:09 END
     3 22:26:36 CREATE FUNCTION CalculateAge(dob DATE) RETURNS INT BEGIN DECLARE age INT; SET age = YEAR... Error Code: 1418. This function has none of DETERMINISTIC, NO SQL, or READS SQL DATA in its declaration an... 0.000 sec
4 22:28:01 CREATE FUNCTION Calculate Age (dob DATE) RETURNS INT DETERMINISTIC BEGIN DECLARE age INT; ... 0 row(s) affected
                                                                                                                                                                                            0.000 sec
```

2.

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                                                                                                - | 🌟 | 🥩 🔍 👖 🖃
             END; //
  21
              DELIMITER ;
   23 • ##Write a select query to fetch the Age of all persons using the function
               SELECT Id, Fname, Lname, CalculateAge(DOB) AS Age
   24
               FROM Persons;
  Export: Wrap Cell Content: IA
            Fname Lname
John Doe LUCES
Jane Smith
Mike Johnson LUCES
Emily Davis LUCES
Chris Brown LUCES
Pat LUCES
Taylor LUCES
               Fname Lname Age
     Id

        Id
        Fname
        Lname

        1
        John
        Doe

        2
        Jane
        Smith

        3
        Mike
        Johnson

        4
        Emily
        Davis

        5
        Chris
        Brown

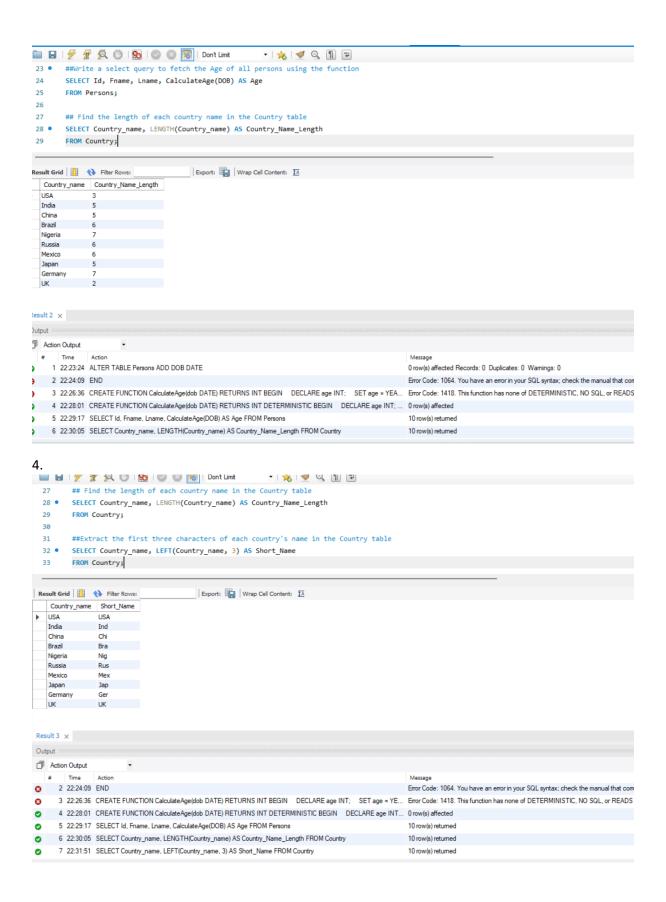
        6
        Pat
        IEEE

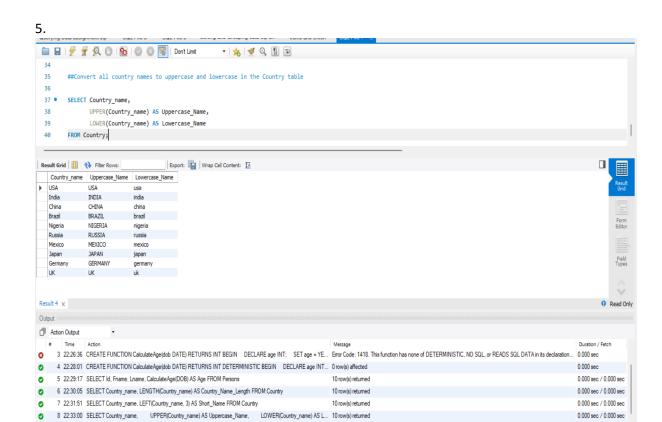
        7
        Alex
        Taylor

        8
        Jordan
        Wilson

        10
        Sam
        Anderson

                                        NULL
 Result 1 ×
Output ::::
 Action Output
   # Time Action
1 22:23:24 ALTER TABLE Persons ADD DOB DATE
                                                                                                                                                            0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0
2 22:24:09 END
                                                                                                                                                            Error Code: 1064. You have an error in your SQL syntax; check the manual that corresponds to your MySQL serve... 0.016 sec
        3 22:26:36 CREATE FUNCTION CalculateAge(dob DATE) RETURNS INT BEGIN DECLARE age INT; SET age = YEA... Error Code: 1418. This function has none of DETERMINISTIC, NO SQL, or READS SQL DATA in its declaration a...
                                                                                                                                                                                                                                                                                              0.000 sec
4 22:28:01 CREATE FUNCTION Calculate Age (dob DATE) RETURNS INT DETERMINISTIC BEGIN DECLARE age INT; ... 0 row(s) affected
                                                                                                                                                                                                                                                                                              0.000 sec
        5 22:29:17 SELECT Id, Fname, Lname, CalculateAge(DOB) AS Age FROM Persons
                                                                                                                                                                                                                                                                                              0.000 sec
```





SUMMARY

Purpose:

The CalculateAge function computes the age of an individual based on their date of birth (DOB).

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Structure:

Function Name: CalculateAge

Parameters:

dob DATE: The date of birth of the person.

Returns:

INT: The calculated age in years.

Explanation:

1. Determine Initial Age:

The function starts by calculating the age based on the current year minus the year of birth.

2. Adjust for Current Date:

 It checks if the current month and day are before the birth month and day. If so, it subtracts one from the age to account for not having reached the birthday yet this year.

3. Return Value:

Finally, the function returns the calculated age.

Usage:

After defining the function, you can use it in SQL queries to fetch the age of individuals from the Persons table.

Key Considerations:

- Ensure that the function is created in an environment where binary logging is enabled and that the function is marked as DETERMINISTIC to avoid errors related to logging settings.
- The function can be called wherever needed in your SQL queries,
 making it reusable for calculating age based on different DOB values.