

Consider the Country table and Persons table that you created earlier and perform the following:

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

```
ALTER TABLE PERSONS ADD DOB DATE;
```

```
UPDATE PERSONS SET DOB =('1986-07-11') WHERE F_NAME='TINU';
```

```
UPDATE PERSONS SET DOB =('1986-07-10') WHERE F_NAME='KANNAN';
```

```
UPDATE PERSONS SET DOB =('1984-03-11') WHERE F_NAME=MANU;
```

```
UPDATE PERSONS SET DOB =(1999-02-10') WHERE F_NAME=SUKANYA;
```

```
UPDATE PERSONS SET DOB =('1998-03-12') WHERE F_NAME=ANDREW;
```

```
UPDATE PERSONS SET DOB =('1978-01-22') WHERE F_NAME='ANIL'
```

```
UPDATE PERSONS SET DOB =('1977-03-22') WHERE F_NAME='SIMILY';
```

```
UPDATE PERSONS SET DOB =('1975-05-16') WHERE F_NAME='ABDUL';
```

```
UPDATE PERSONS SET DOB =('1980-03-12') WHERE F_NAME='ROBERT';
```

```
UPDATE PERSONS SET DOB =('1980-03-22') WHERE F_NAME='SUKVINDER';
```

```
UPDATE PERSONS SET DOB =('1985-04-12') WHERE F_NAME='JALEEL';
```

```
UPDATE PERSONS SET DOB =(2000-12-17') WHERE F_NAME=MANOJ;
```

```

1 • use entri_d41;
2 • SET SQL_SAFE_UPDATES = 0;
3 • ALTER TABLE persons ADD DOB date;
4 • UPDATE persons SET DOB =( '1986-07-12' ) WHERE f_name='tinu';
5 • UPDATE persons SET DOB =( '1986-07-10' ) WHERE f_name='kannan';
6 • UPDATE persons SET DOB =( '1985-04-10' ) WHERE f_name='MANU';
7 • UPDATE persons SET DOB =( '1999-02-11' ) WHERE f_name = 'sukanya';
8 • UPDATE persons SET DOB =( '1998-03-12' ) WHERE f_name = 'andrew';
9 • UPDATE persons SET DOB =( '1978-01-22' ) WHERE f_name = 'anil';
10 • UPDATE persons SET DOB =( '1977-03-22' ) WHERE f_name = 'simily';
11 • UPDATE persons SET DOB =( '1975-05-16' ) WHERE f_name = 'abdul';
12 • UPDATE persons SET DOB =( '1980-03-12' ) WHERE f_name = 'robert';
13 • UPDATE persons SET DOB =( '1980-03-22' ) WHERE f_name = 'sukvinder';
14 • UPDATE persons SET DOB =( '1985-04-12' ) WHERE f_name = 'jaleel';
15 • UPDATE persons SET DOB =( '2000-12-17' ) WHERE f_name = 'manoj';
16
17

```

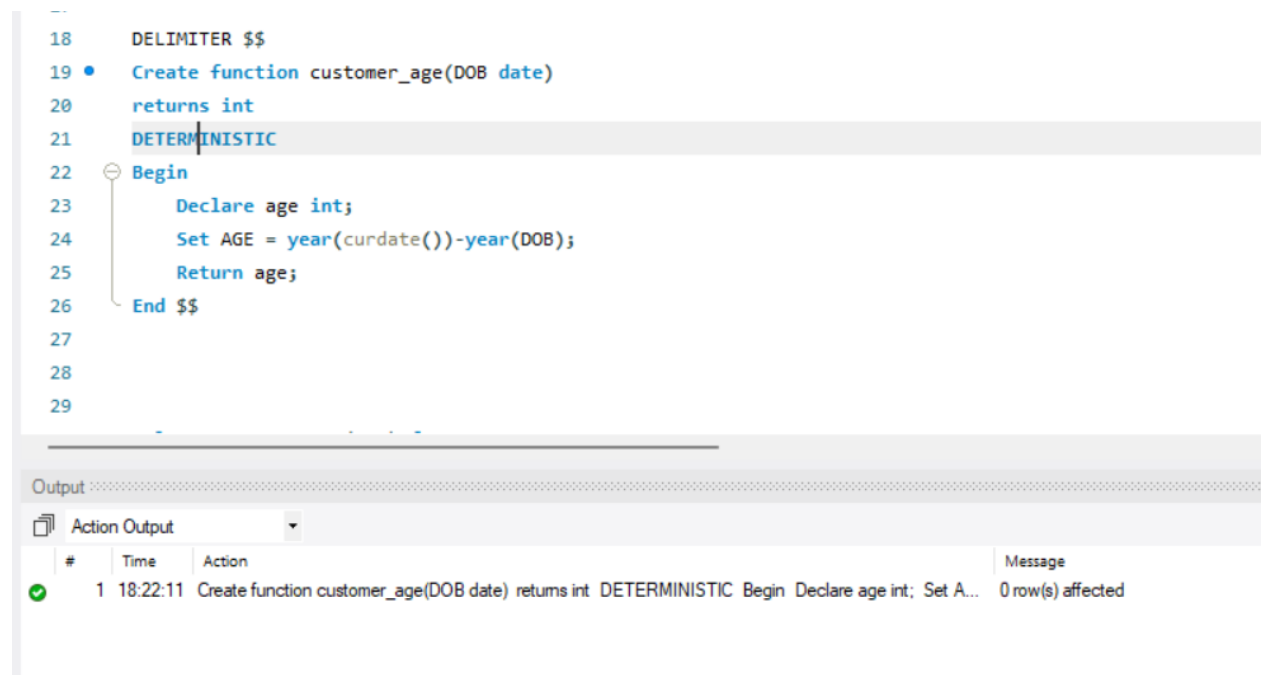
Output

📄 Action Output ▾

#	Time	Action	Message
✖	7 18:04:35	UPDATE persons SET DOB =(1999-02-11) WHERE f_name = 'sukanya'	Error Code: 1292. Incorrect date value: '1986' for column 'DOB' at row 4
✔	8 18:06:00	UPDATE persons SET DOB =('1999-02-11') WHERE f_name = 'sukanya'	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0
✔	9 18:06:04	UPDATE persons SET DOB =('1998-03-12') WHERE f_name = 'andrew'	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0
✔	10 18:07:18	UPDATE persons SET DOB =('1978-01-22') WHERE f_name = 'anil'	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0
✔	11 18:07:21	UPDATE persons SET DOB =('1977-03-22') WHERE f_name = 'simily'	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0
✔	12 18:07:24	UPDATE persons SET DOB =('1975-05-16') WHERE f_name = 'abdul'	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0
✔	13 18:07:27	UPDATE persons SET DOB =('1980-03-12') WHERE f_name = 'robert'	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0
✔	14 18:07:30	UPDATE persons SET DOB =('1980-03-22') WHERE f_name = 'sukvinder'	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0
✔	15 18:07:33	UPDATE persons SET DOB =('1985-04-12') WHERE f name = 'aleel'	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0

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

```
DELIMITER $$
CREATE FUNCTION CUSTOMER_AGE(DOB DATE)
RETURNS INT
DETERMINISTIC
BEGIN
    DECLARE AGE INT;
    SET AGE = YEAR(CURDATE())-YEAR(DOB);
    RETURN AGE;
END $$
```



The screenshot displays a SQL IDE interface. The top pane shows the SQL code for creating a function named `CUSTOMER_AGE`. The code is as follows:

```
18 DELIMITER $$
19 • Create function customer_age(DOB date)
20 returns int
21 DETERMINISTIC
22 Begin
23     Declare age int;
24     Set AGE = year(curdate())-year(DOB);
25     Return age;
26 End $$
27
28
29
```

The bottom pane, titled "Output", shows the "Action Output" for the execution of the SQL script. It contains a table with the following data:

#	Time	Action	Message
1	18:22:11	Create function customer_age(DOB date) returns int DETERMINISTIC Begin Declare age int; Set A...	0 row(s) affected

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

SELECT CUSTOMER_AGE(DOB) FROM PERSONS;

28 • `select customer_age(DOB) from persons;`
29

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

	customer_age(DOB)
▶	38
	38
	40
	25
	26
	46
	47
	49
	44
	44
	39
	24

Result 43 x

Output

Action Output

#	Time	Action	Message
✓ 30	18:24:44	select customer_age(DOB) from persons; select(DOB),F_NAME,L_NAME from persons; UPDATE ...	10 row(s) returned

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

SELECT COUNTRY_NAME, AREA FROM COUNTRY;

```
29 select country_name, area from country;
```

```
30
```

Result Grid			Filter Rows:	Export:	Wrap Cell Content:
	country_name	area			
▶	SINGAPORE	1000			
	INDONESIA	2500			
	USA	4000			
	ROME	1000			
	TANZANIA	1500			
	KENYA	1000			
	UK	2000			
	CANADA	5500			
	AUSTRALIA	6500			
	INDIA	3000			

Result 44	Result 45 ×		
Output			
Action Output			
#	Time	Action	Message
✓ 39	18:27:21	select customer_age(DOB) from persons; select country_name,area from country;	12 row(s) returned

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

SELECT SUBSTRING(COUNTRY_NAME, 1, 3) FROM COUNTRY;

```
30 select SUBSTRING(country_name, 1, 3) from country;
31
```

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

	SUBSTRING(country_name, 1, 3)
▶	SIN
	IND
	USA
	ROM
	TAN
	KEN
	UK
	CAN
	AUS
	IND

Result 46 Result 47 **Result 48** ×

Output

Action Output

#	Time	Action	Message
✓ 42	18:28:20	select customer_age(DOB) from persons; select country_name,area from country; select SUBSTRIN...	10 row(s) returned

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

SELECT UPPER(COUNTRY_NAME) AS UPPERCASE_COUNTRY FROM COUNTRY;

```
31  SELECT UPPER(country_name) as uppercase_country FROM country;
32
```

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

uppercase_country
SINGAPORE
INDONESIA
USA
ROME
TANZANIA
KENYA
UK
CANADA
AUSTRALIA
INDIA

Result 49 | Result 50 | Result 51 | Result 52 x

Output

Action Output

#	Time	Action	Message
✓ 46	18:29:44	select customer_age(DOB) from persons; select country_name,area from country; select SUBSTRIN...	10 row(s) returned