P7:STRINGS

1. Concat the name and surname of the employees using the separador ' ' using the function CONCAT_WS.

```sql
SELECT concat_ws(' ',name,surname) as FullName FROM EMPLOYEES;
```

	FullName
1	BRAD PITT
2	SERGIO SÁNCHEZ
3	MARTA ARROYO
4	REBECA SALA
5	JUAN JIMÉNEZ
6	MONICA MARTÍN
7	BARTOLOME GOMIS
8	MARIA CEREZO
9	JESUS GILBERTO
10	LUIS TOVAR
11	FERNANDO ALONSO
12	XAVIER JIMENO
13	ANA FERNÁNDEZ
14	ANTONIA MUÑOZ
15	ANTONIO BANDERAS
16	FERNANDA RUIZ

```
+--------------------+
| FullName           |
+--------------------+
| BRAD PITT          |
| SERGIO SÁNCHEZ     |
| MARTA ARROYO       |
| REBECA SALA        |
| JUAN JIMÉNEZ       |
| MONICA MARTÍN      |
| BARTOLOME GOMIS    |
| MARIA CEREZO       |
| JESUS GILBERTO     |
| LUIS TOVAR         |
| FERNANDO ALONSO    |
| XAVIER JIMENO      |
| ANA FERNÁNDEZ      |
| ANTONIA MUÑOZ      |
| ANTONIO BANDERAS   |
| FERNANDA RUIZ      |
+--------------------+
16 rows in set (0.002 sec)
```

2. Format employees' commission with format ##,## (you must check MariaDB docs, not only the slides…).

```sql
SELECT format(commission,2,'es_ES') as ComissionF FROM EMPLOYEES;
```

	ComissionF
1	<null>
2	<null>
3	390,00
4	650,00
5	<null>
6	1020,00
7	<null>
8	<null>
9	<null>
10	0,00
11	<null>
12	<null>
13	<null>
14	<null>
15	<null>
16	<null>

```
+------------+
| ComissionF |
+------------+
| NULL       |
| NULL       |
| 390,00     |
| 650,00     |
| NULL       |
| 1020,00    |
| NULL       |
| NULL       |
| NULL       |
| 0,00       |
| NULL       |
| NULL       |
| NULL       |
| NULL       |
| NULL       |
| NULL       |
+------------+
16 rows in set (0.005 sec)
```

3. Return the position of the first A in the employees' surname.

```
SELECT surname, locate('a',surname) as position FROM EMPLOYEES;
```

surname	position
1 PITT	0
2 SÁNCHEZ	2
3 ARROYO	1
4 SALA	2
5 JIMÉNEZ	0
6 MARTÍN	2
7 GOMIS	0
8 CEREZO	0
9 GILBERTO	0
10 TOVAR	4
11 ALONSO	1
12 JIMENO	0
13 FERNÁNDEZ	5
14 MUÑOZ	0
15 BANDERAS	2
16 RUIZ	0

```
+---------------+--------+
| surname       | FirstA |
+---------------+--------+
| PITT          |      0 |
| SÁNCHEZ       |      2 |
| ARROYO        |      1 |
| SALA          |      2 |
| JIMÉNEZ       |      0 |
| MARTÍN        |      2 |
| GOMIS         |      0 |
| CEREZO        |      0 |
| GILBERTO      |      0 |
| TOVAR         |      4 |
| ALONSO        |      1 |
| JIMENO        |      0 |
| FERNÁNDEZ     |      5 |
| MUÑOZ         |      0 |
| BANDERAS      |      2 |
| RUIZ          |      0 |
+---------------+--------+
16 rows in set (0.001 sec)
```

4. Return the position of the second A in the employees' surname. Clue: Check IF function and use nested functions SUBSTRING and INSTR.
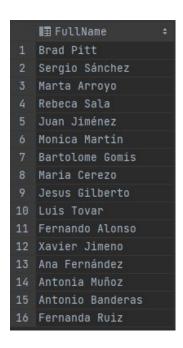
```
SELECT surname, if ( instr(substring(surname,
instr(surname,'a')+1),'a')=0, 0,
    instr(surname,'a')+instr(substring(surname,
instr(surname,'a')+1),'a')
) as SecondA FROM EMPLOYEES;
```

surname	SecondA
1 PITT	0
2 SÁNCHEZ	0
3 ARROYO	0
4 SALA	4
5 JIMÉNEZ	0
6 MARTÍN	0
7 GOMIS	0
8 CEREZO	0
9 GILBERTO	0
10 TOVAR	0
11 ALONSO	0
12 JIMENO	0
13 FERNÁNDEZ	0
14 MUÑOZ	0
15 BANDERAS	7
16 RUIZ	0

```
+---------------+---------+
| surname       | SecondA |
+---------------+---------+
| PITT          |       0 |
| SÁNCHEZ       |       0 |
| ARROYO        |       0 |
| SALA          |       4 |
| JIMÉNEZ       |       0 |
| MARTÍN        |       0 |
| GOMIS         |       0 |
| CEREZO        |       0 |
| GILBERTO      |       0 |
| TOVAR         |       0 |
| ALONSO        |       0 |
| JIMENO        |       0 |
| FERNÁNDEZ     |       0 |
| MUÑOZ         |       0 |
| BANDERAS      |       7 |
| RUIZ          |       0 |
+---------------+---------+
16 rows in set (0.003 sec)
```

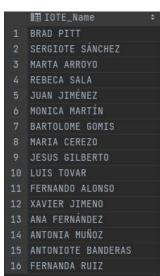**5. Return the full name of the employees with the next format:**

```sql
SELECT concat_ws('
',concat(left(name,1),lower(substring(name,2,length(name)))),concat(left(surname,1),lower(substring(surname,2,length(surname))))) as FullName
FROM EMPLOYEES;
```

	FullName
1	Brad Pitt
2	Sergio Sánchez
3	Marta Arroyo
4	Rebeca Sala
5	Juan Jiménez
6	Monica Martín
7	Bartolome Gomis
8	Maria Cerezo
9	Jesus Gilberto
10	Luis Tovar
11	Fernando Alonso
12	Xavier Jimeno
13	Ana Fernández
14	Antonia Muñoz
15	Antonio Banderas
16	Fernanda Ruiz

```
+--------------------+
| FullName           |
+--------------------+
| Brad Pitt          |
| Sergio Sánchez     |
| Marta Arroyo       |
| Rebeca Sala        |
| Juan Jiménez       |
| Monica Martín      |
| Bartolome Gomis    |
| Maria Cerezo       |
| Jesus Gilberto     |
| Luis Tovar         |
| Fernando Alonso    |
| Xavier Jimeno      |
| Ana Fernández      |
| Antonia Muñoz      |
| Antonio Banderas   |
| Fernanda Ruiz      |
+--------------------+
16 rows in set (0.005 sec)
```
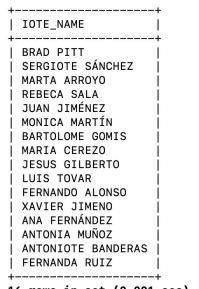
6. Select all the full names of the databases but changing 'IO' for 'IOTE'. If you do this using string function in a SELECT clause you don't change the data stored in the database…

```sql
SELECT replace(concat_ws(' ',name,surname), 'IO','IOTE') as IOTE_Name FROM EMPLOYEES;
```

	IOTE_Name
1	BRAD PITT
2	SERGIOTE SÁNCHEZ
3	MARTA ARROYO
4	REBECA SALA
5	JUAN JIMÉNEZ
6	MONICA MARTÍN
7	BARTOLOME GOMIS
8	MARIA CEREZO
9	JESUS GILBERTO
10	LUIS TOVAR
11	FERNANDO ALONSO
12	XAVIER JIMENO
13	ANA FERNÁNDEZ
14	ANTONIA MUÑOZ
15	ANTONIOTE BANDERAS
16	FERNANDA RUIZ

```
+--------------------+
| IOTE_NAME          |
+--------------------+
| BRAD PITT          |
| SERGIOTE SÁNCHEZ   |
| MARTA ARROYO       |
| REBECA SALA        |
| JUAN JIMÉNEZ       |
| MONICA MARTÍN      |
| BARTOLOME GOMIS    |
| MARIA CEREZO       |
| JESUS GILBERTO     |
| LUIS TOVAR         |
| FERNANDO ALONSO    |
| XAVIER JIMENO      |
| ANA FERNÁNDEZ      |
| ANTONIA MUÑOZ      |
| ANTONIOTE BANDERAS |
| FERNANDA RUIZ      |
+--------------------+
16 rows in set (0.001 sec)
```
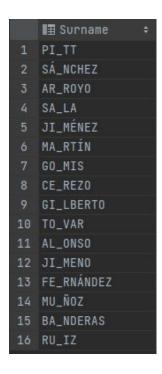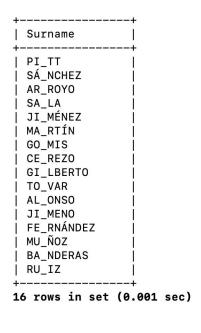
7. Update all the names like Antonio or Antonia with Tonio or Tonia. You must use UPDATE and the function REPLACE.

```
UPDATE EMPLOYEES
SET name = replace(name, 'ANTONIA','TONIA'), name = replace(name, 'ANTONIO','TONIO');
```

```
SQL1NORMALSTRINGS> UPDATE EMPLOYEES
                   SET name = replace(name, 'ANTONIA','TONIA'), name = replace(name, 'ANTONIO','TONIO')
[2021-03-14 20:13:06] 16 rows affected in 35 ms
```

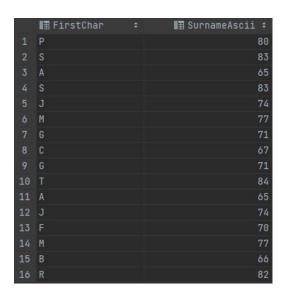**8. Show the surnames of the employees with an underscore after the second char.**

```
SELECT
concat_ws('_',substring(surname,1,2),substring(surname,3,length(surname))) as Surname FROM EMPLOYEES;
```

🔡 Surname
1   PI_TT
2   SÁ_NCHEZ
3   AR_ROYO
4   SA_LA
5   JI_MÉNEZ
6   MA_RTÍN
7   GO_MIS
8   CE_REZO
9   GI_LBERTO
10 TO_VAR
11 AL_ONSO
12 JI_MENO
13 FE_RNÁNDEZ
14 MU_ÑOZ
15 BA_NDERAS
16 RU_IZ

```
+----------------+
| Surname        |
+----------------+
| PI_TT          |
| SÁ_NCHEZ       |
| AR_ROYO        |
| SA_LA          |
| JI_MÉNEZ       |
| MA_RTÍN        |
| GO_MIS         |
| CE_REZO        |
| GI_LBERTO      |
| TO_VAR         |
| AL_ONSO        |
| JI_MENO        |
| FE_RNÁNDEZ     |
| MU_ÑOZ         |
| BA_NDERAS      |
| RU_IZ          |
+----------------+
16 rows in set (0.001 sec)
```

9. Write the first char of the surnames and the first char of the surnames in ASCII code.

```
SELECT left(surname,1) as FirstChar, ascii(left(surname,1)) as
SurnameAscii FROM EMPLOYEES;
```
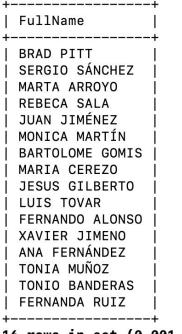
	FirstChar	SurnameAscii
1	P	80
2	S	83
3	A	65
4	S	83
5	J	74
6	M	77
7	G	71
8	C	67
9	G	71
10	T	84
11	A	65
12	J	74
13	F	70
14	M	77
15	B	66
16	R	82

```
+-----------+--------------+
| FirstChar | SurnameASCII |
+-----------+--------------+
| P         |           80 |
| S         |           83 |
| A         |           65 |
| S         |           83 |
| J         |           74 |
| M         |           77 |
| G         |           71 |
| C         |           67 |
| G         |           71 |
| T         |           84 |
| A         |           65 |
| J         |           74 |
| F         |           70 |
| M         |           77 |
| B         |           66 |
| R         |           82 |
+-----------+--------------+
16 rows in set (0.001 sec)
```

10. Show the full name of the employees but ensuring that there won't be white spaces before and/or after the name and/or surname.

```
SELECT concat_ws(' ',trim(name),trim(surname)) as FullName FROM
EMPLOYEES;
```

	FullName
1	BRAD PITT
2	SERGIO SÁNCHEZ
3	MARTA ARROYO
4	REBECA SALA
5	JUAN JIMÉNEZ
6	MONICA MARTÍN
7	BARTOLOME GOMIS
8	MARIA CEREZO
9	JESUS GILBERTO
10	LUIS TOVAR
11	FERNANDO ALONSO
12	XAVIER JIMENO
13	ANA FERNÁNDEZ
14	TONIA MUÑOZ
15	TONIO BANDERAS
16	FERNANDA RUIZ

```
+-----------------+
| FullName        |
+-----------------+
| BRAD PITT       |
| SERGIO SÁNCHEZ  |
| MARTA ARROYO    |
| REBECA SALA     |
| JUAN JIMÉNEZ    |
| MONICA MARTÍN   |
| BARTOLOME GOMIS |
| MARIA CEREZO    |
| JESUS GILBERTO  |
| LUIS TOVAR      |
| FERNANDO ALONSO |
| XAVIER JIMENO   |
| ANA FERNÁNDEZ   |
| TONIA MUÑOZ     |
| TONIO BANDERAS  |
| FERNANDA RUIZ   |
+-----------------+
16 rows in set (0.001 sec)
```