

## Exercise 10

By default, SQL Server sorts *NULL*s before non-*NULL* values. To get *NULL*s to sort last, you can use a *CASE* expression that returns 1 when the *region* column is *NULL* and 0 when it is not *NULL*. Specify this *CASE* expression as the first sort column and the *region* column as the second. This way, non-*NULL*s sort correctly among themselves first followed by *NULL*s. Here's the complete solution query:

```
SELECT custid, region
FROM Sales.Customers
ORDER BY
CASE
    WHEN region IS NULL THEN 1 ELSE 0
END
```

The query does the following

- It assigns a value of 1 if the region is a *NULL*

Else if it is not a *NULL* then it is assigned a value of 0

- By doing this we can sort the query in order

- By default, SQL orders in DESC (Low - High), So since we assigned 1(High) to *NULL* and 0(Low) to NOT *NULL* the table is displayed from NOT *NULL*(Low) to *NULL*(High)

- Thus, all the *NULL*'s are displayed last

custid	region
55	AK
10	BC
42	BC
45	CA
37	Co. Cork
33	DF
71	ID
38	Isle of Wigt
46	Lara
78	MT
...	
1	NULL
2	NULL
3	NULL
4	NULL
5	NULL
6	NULL
7	NULL
8	NULL
9	NULL
11	NULL
...	
(91 row(s) affected)	

If we wanted to display *NULL*'s first we could have done the following

```
SELECT custid, region
FROM Sales.Customers
ORDER BY
CASE
    WHEN region IS NULL THEN 1 ELSE 0
END DESC
```

OR this, which would have been equivalent to the following code since SQL by

default sorts in ASC order

```
SELECT custid, region
FROM Sales.Customers
```