Funciones Offset

LAG

Ejemplo 1

```
USE AdventureWorks2019

SELECT [ProductID]
      ,[LocationID]
      ,[Shelf]
      ,[Bin]
      ,[Quantity]
      ,LAG(Quantity) OVER (PARTITION BY ProductID
                           ORDER BY ProductID, Quantity) AS [BeforeQty]
FROM [Production].[ProductInventory]
```

Results | Messages

	ProductID	LocationID	Shelf	Bin	Quantity	BeforeQty
1	1	6	B	5	324	NULL
2	1	50	A	5	353	324
3	1	1	A	1	408	353
4	2	6	B	1	318	NULL
5	2	50	A	6	364	318
6	2	1	A	2	427	364
7	3	50	A	10	324	NULL
8	3	6	B	9	443	324
9	3	1	A	7	585	443
10	4	50	A	11	388	NULL
11	4	6	B	10	422	388
12	4	1	A	6	512	422
13	316	10	B	1	388	NULL
14	316	50	B	8	441	388
15	316	5	A	11	532	441
16	317	50	A	21	152	NULL
17	317	5	A	1	158	152
18	317	1	C	1	283	158
19	318	50	A	22	132	NULL
20	318	1	C	2	136	132
21	318	5	A	2	171	136

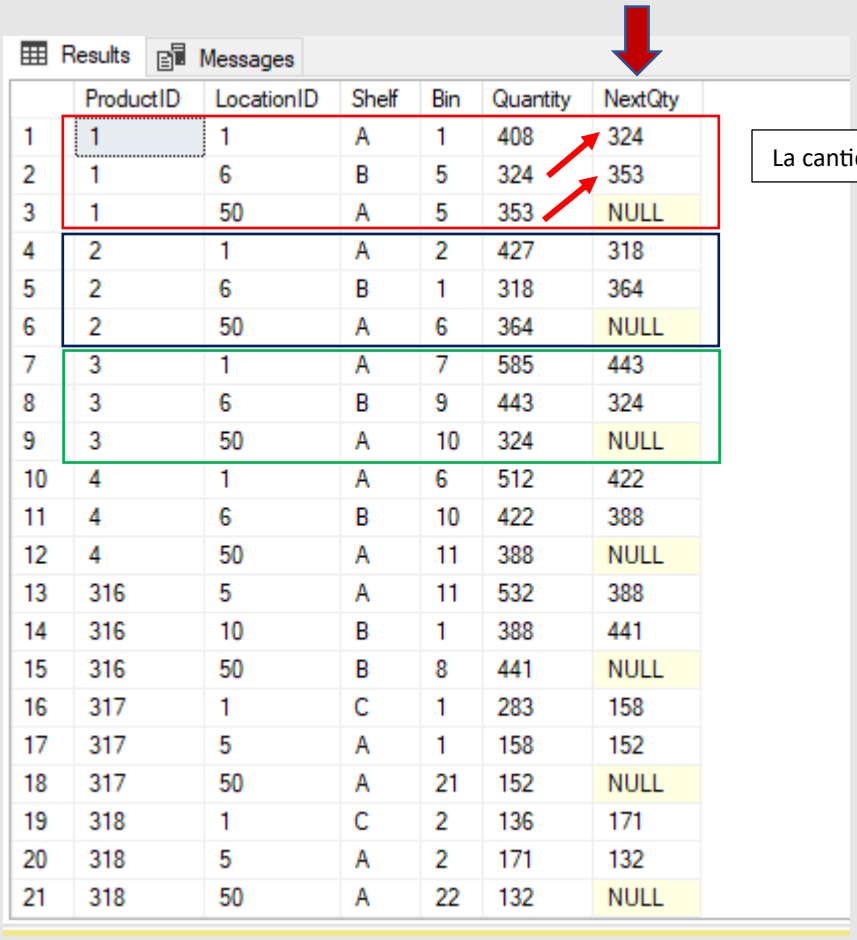
La cantidad anterior

LEAD

Ejemplo 1

```
USE AdventureWorks2019

SELECT [ProductID]
      ,[LocationID]
      ,[Shelf]
      ,[Bin]
      ,[Quantity]
      ,LEAD(Quantity) OVER (PARTITION BY ProductID
                            ORDER BY ProductID, Quantity) AS [NextQty]
FROM [Production].[ProductInventory]
```



Results | Messages

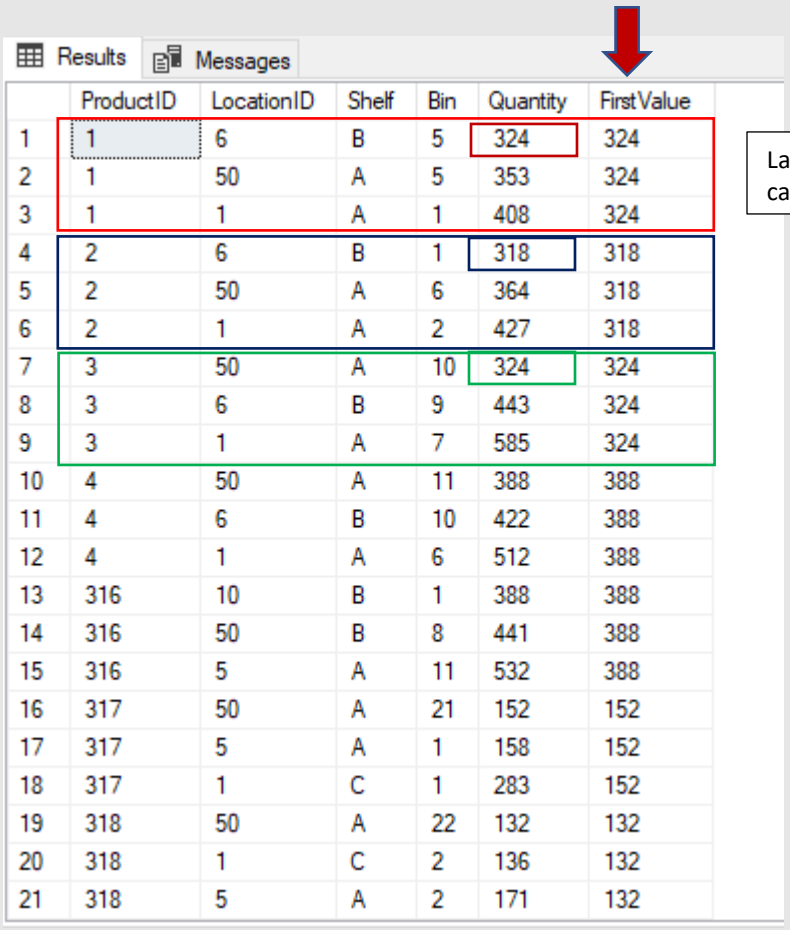
	ProductID	LocationID	Shelf	Bin	Quantity	NextQty
1	1	1	A	1	408	324
2	1	6	B	5	324	353
3	1	50	A	5	353	NULL
4	2	1	A	2	427	318
5	2	6	B	1	318	364
6	2	50	A	6	364	NULL
7	3	1	A	7	585	443
8	3	6	B	9	443	324
9	3	50	A	10	324	NULL
10	4	1	A	6	512	422
11	4	6	B	10	422	388
12	4	50	A	11	388	NULL
13	316	5	A	11	532	388
14	316	10	B	1	388	441
15	316	50	B	8	441	NULL
16	317	1	C	1	283	158
17	317	5	A	1	158	152
18	317	50	A	21	152	NULL
19	318	1	C	2	136	171
20	318	5	A	2	171	132
21	318	50	A	22	132	NULL

FIRST_VALUE

Ejemplo 1

```
USE AdventureWorks2019

SELECT [ProductID]
      ,[LocationID]
      ,[Shelf]
      ,[Bin]
      ,[Quantity]
      ,FIRST_VALUE(Quantity) OVER (PARTITION BY ProductID
                        ORDER BY ProductID, Quantity ASC) AS [FirstValue]
FROM [Production].[ProductInventory]
```



Results | Messages

	ProductID	LocationID	Shelf	Bin	Quantity	FirstValue
1	1	6	B	5	324	324
2	1	50	A	5	353	324
3	1	1	A	1	408	324
4	2	6	B	1	318	318
5	2	50	A	6	364	318
6	2	1	A	2	427	318
7	3	50	A	10	324	324
8	3	6	B	9	443	324
9	3	1	A	7	585	324
10	4	50	A	11	388	388
11	4	6	B	10	422	388
12	4	1	A	6	512	388
13	316	10	B	1	388	388
14	316	50	B	8	441	388
15	316	5	A	11	532	388
16	317	50	A	21	152	152
17	317	5	A	1	158	152
18	317	1	C	1	283	152
19	318	50	A	22	132	132
20	318	1	C	2	136	132
21	318	5	A	2	171	132

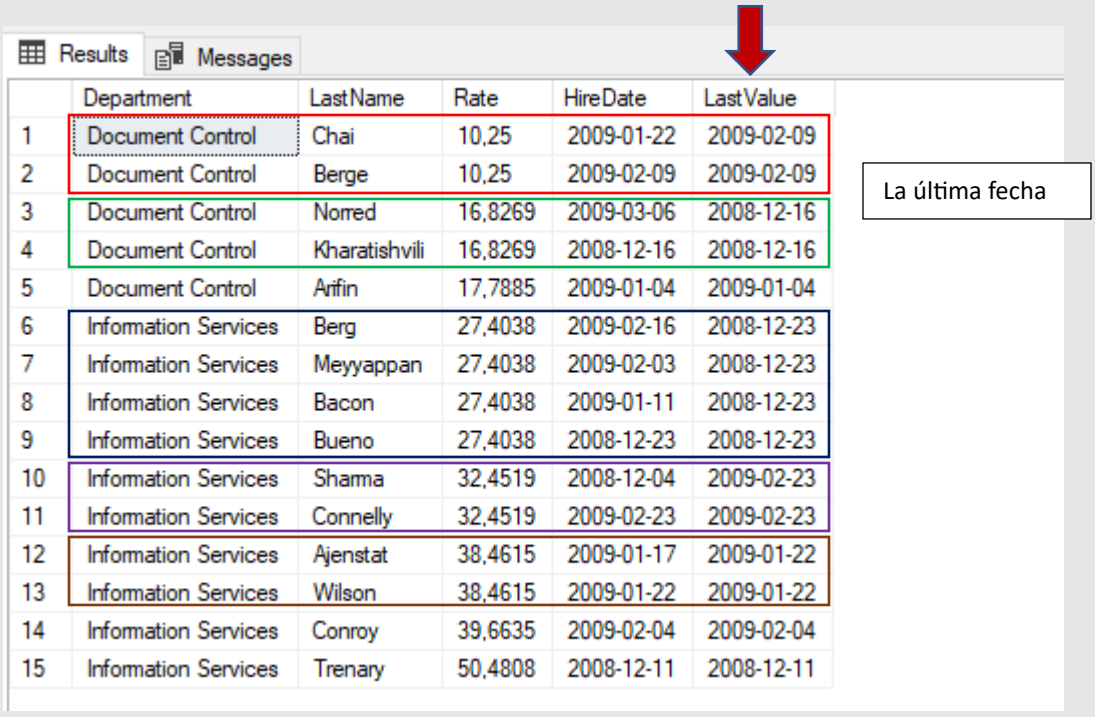
La primera cantidad, en este caso, la cantidad menor.

LAST_VALUE

Ejemplo 1

```
USE AdventureWorks2019

SELECT Department
    , LastName
    , Rate
    , HireDate
    , LAST_VALUE(HireDate) OVER (PARTITION BY Department
                                 ORDER BY Rate) AS LastValue
FROM HumanResources.vEmployeeDepartmentHistory AS edh
INNER JOIN HumanResources.EmployeePayHistory AS eph
    ON eph.BusinessEntityID = edh.BusinessEntityID
INNER JOIN HumanResources.Employee AS e
    ON e.BusinessEntityID = edh.BusinessEntityID
WHERE Department IN (N'Information Services', N'Document Control');
```



Results | Messages

	Department	LastName	Rate	HireDate	LastValue
1	Document Control	Chai	10,25	2009-01-22	2009-02-09
2	Document Control	Berge	10,25	2009-02-09	2009-02-09
3	Document Control	Norred	16,8269	2009-03-06	2008-12-16
4	Document Control	Kharatishvili	16,8269	2008-12-16	2008-12-16
5	Document Control	Arifin	17,7885	2009-01-04	2009-01-04
6	Information Services	Berg	27,4038	2009-02-16	2008-12-23
7	Information Services	Meyyappan	27,4038	2009-02-03	2008-12-23
8	Information Services	Bacon	27,4038	2009-01-11	2008-12-23
9	Information Services	Bueno	27,4038	2008-12-23	2008-12-23
10	Information Services	Sharma	32,4519	2008-12-04	2009-02-23
11	Information Services	Connelly	32,4519	2009-02-23	2009-02-23
12	Information Services	Ajenstat	38,4615	2009-01-17	2009-01-22
13	Information Services	Wilson	38,4615	2009-01-22	2009-01-22
14	Information Services	Conroy	39,6635	2009-02-04	2009-02-04
15	Information Services	Trenary	50,4808	2008-12-11	2008-12-11