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Preeliminar #3

```
SELECT Ventas.idventas, producto.nombre, productos_venta.cantidad, cliente.nombre AS  
Expr1, [user].nombre AS Expr2  
FROM Ventas INNER JOIN  
[user] ON Ventas.iduser = [user].iduser INNER JOIN  
cliente ON Ventas.idcliente = cliente.idcliente INNER JOIN  
productos_venta ON Ventas.idventas = productos_venta.idventas INNER JOIN  
producto ON productos_venta.idproducto = producto.idproducto
```

Unidad de workload	Explicación	Norma																														
<div><div>Clustered Index Scan (Clustered)</div><div>Scanning a clustered index, entirely or only a range.</div><table><tr><td>Physical Operation</td><td>Clustered Index Scan</td></tr><tr><td>Logical Operation</td><td>Clustered Index Scan</td></tr><tr><td>Estimated Execution Mode</td><td>Row</td></tr><tr><td>Storage</td><td>RowStore</td></tr><tr><td>Estimated Operator Cost</td><td>1,92958 (87%)</td></tr><tr><td>Estimated I/O Cost</td><td>1,37942</td></tr><tr><td>Estimated Subtree Cost</td><td>1,92958</td></tr><tr><td>Estimated CPU Cost</td><td>0,550157</td></tr><tr><td>Estimated Number of Executions</td><td>1</td></tr><tr><td>Estimated Number of Rows to be Read</td><td>500000</td></tr><tr><td>Estimated Number of Rows for All Executions</td><td>49,9533</td></tr><tr><td>Estimated Number of Rows Per Execution</td><td>49,9533</td></tr><tr><td>Estimated Row Size</td><td>19 B</td></tr><tr><td>Ordered</td><td>False</td></tr><tr><td>Node ID</td><td>10</td></tr></table><div>Predicate [EsencialVerde].[dbo].[productos_venta].[idventas]=(68)</div><div>Object [EsencialVerde].[dbo].[productos_venta].[PK_productos_venta]</div><div>Output List [EsencialVerde].[dbo].[productos_venta].idproducto; [EsencialVerde].[dbo].[productos_venta].cantidad</div></div>	Physical Operation	Clustered Index Scan	Logical Operation	Clustered Index Scan	Estimated Execution Mode	Row	Storage	RowStore	Estimated Operator Cost	1,92958 (87%)	Estimated I/O Cost	1,37942	Estimated Subtree Cost	1,92958	Estimated CPU Cost	0,550157	Estimated Number of Executions	1	Estimated Number of Rows to be Read	500000	Estimated Number of Rows for All Executions	49,9533	Estimated Number of Rows Per Execution	49,9533	Estimated Row Size	19 B	Ordered	False	Node ID	10	Recorre todos los registros idVentas de la tabla productos_venta para matchearlo con el idVentas de Ventas	Añadir un non-clustered index para optimizar la consulta.
Physical Operation	Clustered Index Scan																															
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<div><div>Hash Match</div><div>Use each row from the top input to build a hash table, and each row from the bottom input to probe into the hash table, outputting all matching rows.</div><table><tr><td>Physical Operation</td><td>Hash Match</td></tr><tr><td>Logical Operation</td><td>Inner Join</td></tr><tr><td>Estimated Execution Mode</td><td>Row</td></tr><tr><td>Estimated Operator Cost</td><td>0,0229479 (10%)</td></tr><tr><td>Estimated I/O Cost</td><td>0</td></tr><tr><td>Estimated Subtree Cost</td><td>0,208428</td></tr><tr><td>Estimated CPU Cost</td><td>0,0229448</td></tr><tr><td>Estimated Number of Executions</td><td>1</td></tr><tr><td>Estimated Number of Rows Per Execution</td><td>50</td></tr><tr><td>Estimated Number of Rows for All Executions</td><td>50</td></tr><tr><td>Estimated Row Size</td><td>98 B</td></tr><tr><td>Node ID</td><td>1</td></tr></table><div>Output List [EsencialVerde].[dbo].[Ventas].idventas; [EsencialVerde].[dbo].[user].nombre; [EsencialVerde].[dbo].[cliente].nombre; [EsencialVerde].[dbo].[productos_venta].cantidad; [EsencialVerde].[dbo].[producto].nombre</div><div>Hash Keys Probe [EsencialVerde].[dbo].[producto].idproducto</div></div>	Physical Operation	Hash Match	Logical Operation	Inner Join	Estimated Execution Mode	Row	Estimated Operator Cost	0,0229479 (10%)	Estimated I/O Cost	0	Estimated Subtree Cost	0,208428	Estimated CPU Cost	0,0229448	Estimated Number of Executions	1	Estimated Number of Rows Per Execution	50	Estimated Number of Rows for All Executions	50	Estimated Row Size	98 B	Node ID	1	El engine está poniendo en hash el idproducto, en cada celda el producto, recorre cada producto por venta y le hace hash al idproducto.	Hacer un index de idproducto para generar un probe.						
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Una vista indexada debido a que me permite hacer optimizaciones de los datos y esto en una vista dinámica no se puede, ya que tiene índices clustered y por esto se tiene un acceso más rápido a la información.