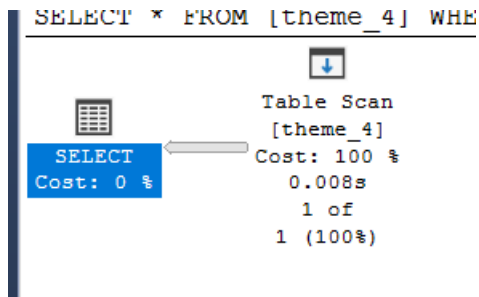


1. Кластерный индекс

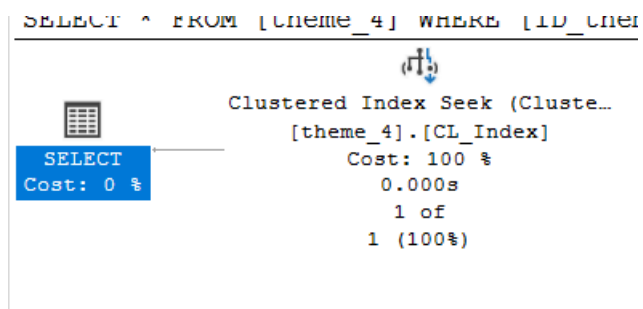
Создаем копию таблицы theme и заполняем ее 100 000 строками

```
select *from theme_4  
where ID_theme = 1000
```



| SELECT | |
|---|----------|
| Cached plan size | 24 KB |
| Estimated Operator Cost | 0 (0%) |
| Degree of Parallelism | 1 |
| Estimated Subtree Cost | 0,295504 |
| Estimated Number of Rows Per Execution | 1 |
| Statement | |
| SELECT * FROM [theme_4] WHERE [ID_theme]=@1 | |

```
CREATE CLUSTERED INDEX CL_Index  
ON theme_4(ID_theme);
```

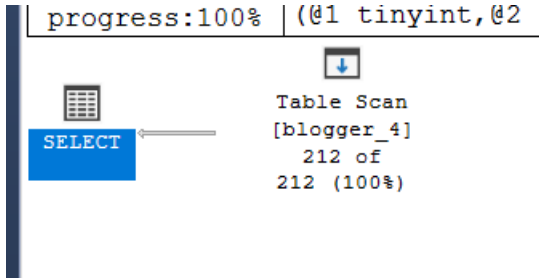


| SELECT | |
|---|-----------|
| Cached plan size | 24 KB |
| Estimated Operator Cost | 0 (0%) |
| Degree of Parallelism | 1 |
| Estimated Subtree Cost | 0,0032831 |
| Estimated Number of Rows Per Execution | 1 |
| Statement | |
| SELECT * FROM [theme_4] WHERE [ID_theme]=@1 | |

2. Некластерный индекс (Составной индекс)

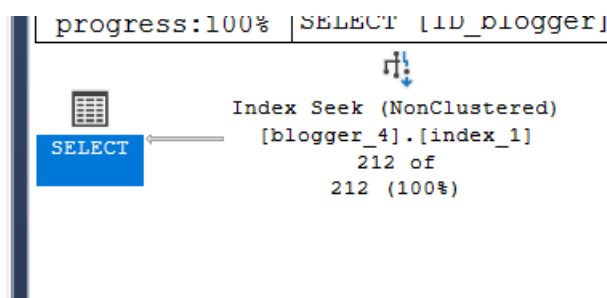
Создадим копию таблицы блогеры и заполним 100000 строк.

```
SELECT [ID_blogger], [Name_blogger]
FROM [dbo].[blogger_4]
WHERE [ID_blogger] BETWEEN 1 AND 212
AND [Name_blogger] != 'a';
```



| SELECT | |
|---|----------|
| Estimated operator progress: | 100% |
| Actual Number of Rows for All Executions | 212 |
| Cached plan size | 24 KB |
| Estimated Operator Cost | 0 (0%) |
| Estimated Subtree Cost | 0,487356 |
| Estimated Number of Rows Per Execution | 212 |
| Statement | |
| (@1 tinyint,@2 tinyint,@3 varchar(8000))SELECT [ID_blogger],[Name_blogger] FROM [dbo].[blogger_4] WHERE [ID_blogger]>=@1 AND [ID_blogger]<=@2 AND [Name_blogger]<>@3 | |

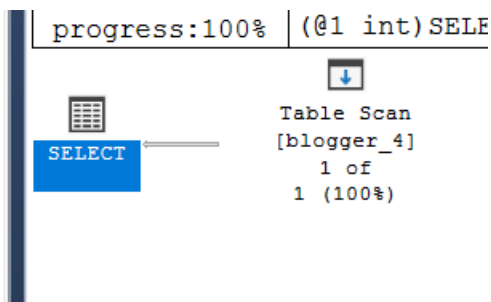
```
CREATE INDEX index_1
on [dbo].[blogger_4]([ID_blogger], [Name_blogger]);
```



| SELECT | |
|---|-----------|
| Estimated operator progress: | 100% |
| Actual Number of Rows for All Executions | 212 |
| Cached plan size | 24 KB |
| Estimated Operator Cost | 0 (0%) |
| Estimated Subtree Cost | 0,0035152 |
| Estimated Number of Rows Per Execution | 212 |
| Statement | |
| SELECT [ID_blogger], [Name_blogger] FROM [dbo].[blogger_4] | |

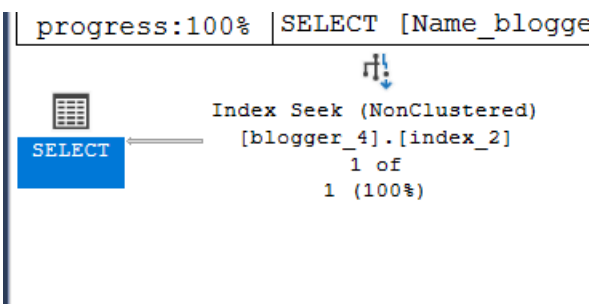
3. Некластерный индекс (Покрывающий)

```
SELECT [Name_blogger], [date_of_birth], [registration_date], [language_blogger]
FROM [dbo].[blogger_4]
WHERE [ID_blogger] = 92000;
```



| | |
|--|----------|
| Estimated operator progress: 100% | |
| Actual Number of Rows for All Executions | 1 |
| Cached plan size | 24 KB |
| Estimated Operator Cost | 0 (0%) |
| Estimated Subtree Cost | 0,487356 |
| Estimated Number of Rows Per Execution | 1 |
| Statement | |

```
CREATE INDEX index_2
ON [dbo].[blogger_4]([ID_blogger])
INCLUDE ([Name_blogger], [date_of_birth], [registration_date], [language_blogger])
```

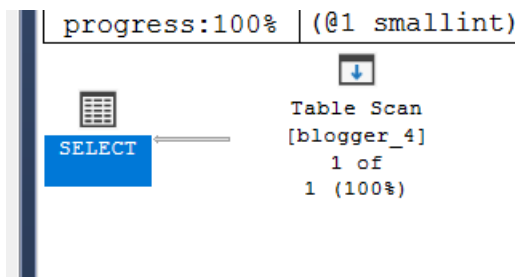


| | |
|--|-----------|
| Estimated operator progress: 100% | |
| Actual Number of Rows for All Executions | 1 |
| Cached plan size | 24 KB |
| Degree of Parallelism | 1 |
| Estimated Operator Cost | 0 (0%) |
| Estimated Subtree Cost | 0,0032831 |
| Estimated Number of Rows Per Execution | 1 |
| Statement | |

SELECT [Name_blogger],[date_of_birth],[registration_date],

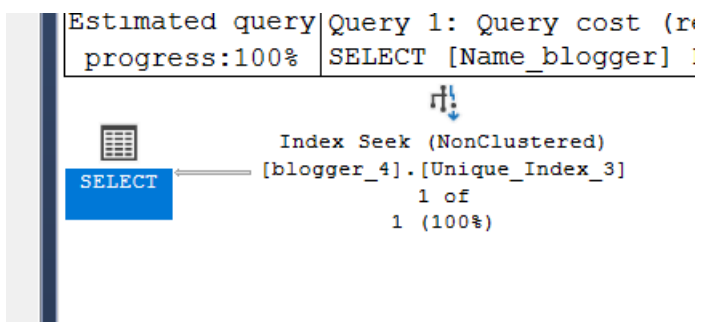
4. Некластерный индекс (Уникальный)

```
SELECT [Name_blogger]
FROM [dbo].[blogger_4]
WHERE [ID_blogger] = 2000;
```



| Estimated operator progress: 100% | |
|--|----------|
| Actual Number of Rows for All Executions | 1 |
| Cached plan size | 24 KB |
| Estimated Operator Cost | 0 (0%) |
| Estimated Subtree Cost | 0,487356 |
| Estimated Number of Rows Per Execution | 1 |
| Statement | |
| (@1 smallint)SELECT [Name_blogger] FROM [dbo].[blogger_4] WHERE [ID_blogger] = 2000; | |

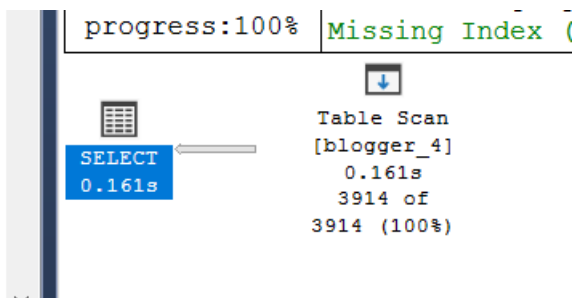
```
CREATE UNIQUE INDEX Unique_Index_3
ON [dbo].[blogger_4]([ID_blogger])
INCLUDE ([Name_blogger])
```



| Estimated operator progress: 100% | |
|--|-----------|
| Actual Number of Rows for All Executions | 1 |
| Cached plan size | 16 KB |
| Degree of Parallelism | 1 |
| Estimated Operator Cost | 0 (0%) |
| Estimated Subtree Cost | 0,0032831 |
| Estimated Number of Rows Per Execution | 1 |
| Statement | |
| CREATE UNIQUE INDEX Unique_Index_3 ON [dbo].[blogger_4]([ID_blogger]) INCLUDE ([Name_blogger]) | |

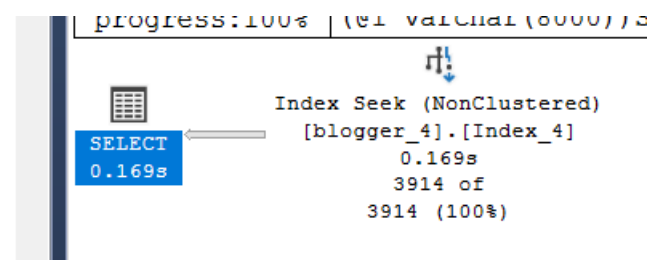
5. Некластерный индекс (С включенными столбцами)

```
SELECT [language_blogger]  
FROM [dbo].[blogger_4]  
WHERE [Name_blogger] = 'f';
```



| | |
|---|----------|
| Actual Number of Rows for All Executions | 3914 |
| Cached plan size | 24 KB |
| Estimated Operator Cost | 0 (0%) |
| Estimated Subtree Cost | 0,487356 |
| Estimated Number of Rows Per Execution | 3914 |

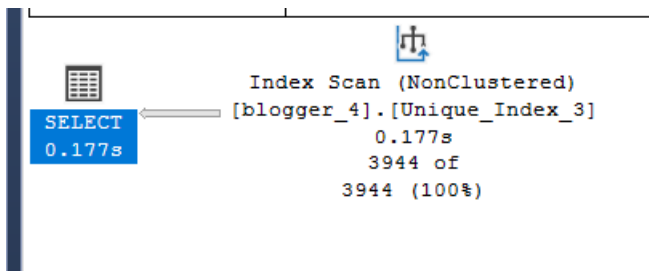
```
CREATE INDEX Index_4  
ON [dbo].[blogger_4]([Name_blogger])  
INCLUDE ([language_blogger]);
```



| | |
|---|-----------|
| Estimated operator progress: 100% | |
| Actual Number of Rows for All Executions | 3914 |
| Cached plan size | 24 KB |
| Estimated Operator Cost | 0 (0%) |
| Estimated Subtree Cost | 0,0155154 |
| Estimated Number of Rows Per Execution | 3914 |

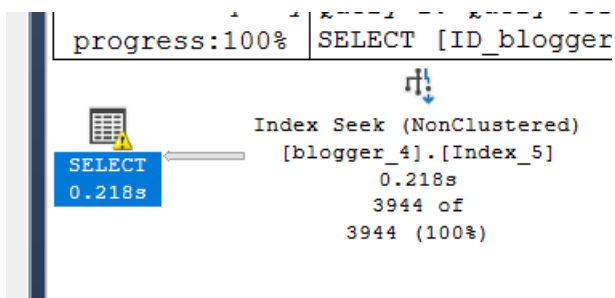
6. Некластерный индекс (Отфильтрованный)

```
SELECT [ID_blogger], [Name_blogger]
FROM [dbo].[blogger_4]
WHERE [Name_blogger] = 'M'
```



| | |
|--|----------|
| Actual Number of Rows for All Executions | 3944 |
| Cached plan size | 24 KB |
| Estimated Operator Cost | 0 (0%) |
| Estimated Subtree Cost | 0,334763 |
| Estimated Number of Rows Per Execution | 3944 |
| Statement | |

```
CREATE INDEX Index_5
ON [dbo].[blogger_4]([Name_blogger])
INCLUDE ([ID_blogger])
WHERE [Name_blogger] = 'M'
```



| | |
|--|-----------|
| Estimated operator progress: 100% | |
| Actual Number of Rows for All Executions | 3944 |
| Cached plan size | 24 KB |
| Estimated Operator Cost | 0 (0%) |
| Estimated Subtree Cost | 0,0076204 |
| Estimated Number of Rows Per Execution | 3944 |
| Statement | |