МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ НАЦІОНАЛЬНОМУ УНІВЕРСИТЕТІ "ЛЬВІВСЬКА ПОЛІТЕХНІКА"

Кафедра систем штучного інтелекту

Лабораторна робота №13

з дисципліни

«Організація баз даних та знань»

Виконав:

студент групи КН-208

Шегда Микола

Викладач:

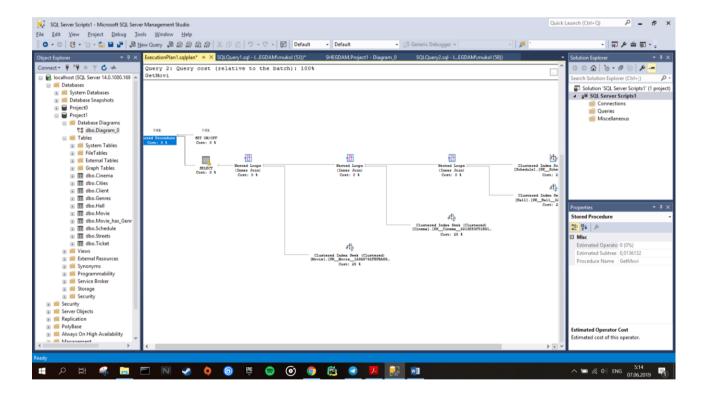
Мельникова H. I.

Мета роботи: Навчитися аналізувати роботу СУБД та оптимізовувати виконання складних запитів на вибірку даних. Виконати аналіз складних запитів за допомогою директиви EXPLAIN, модифікувати найповільніші запити з метою їх пришвидчення.

За допомогою команди SHOWPLAN проаналізуємо наші запити.

Set showplan_xml

```
use Project1;
go
set showplan_xml on;
go
exec GetMovi '2019-05-02';
go
set showplan_xml off;
go
```



```
use Project1;
go

set showplan_all on;
go

exec GetMovi '2019-05-02';
go

set showplan_all off;
go
```

	StmtText	Stmtld	Nodeld	Parent	PhysicalOp	LogicalOp	Argument	De
1	exec GetMovi '2019-05-02';	1	1	0	NULL	NULL	1	N
2	CREATE PROCEDURE GetMovi @month date A	2	2	1	NULL	NULL	3	N
3	select DateMovie, Movie.MovieName, Cinema.id as ci	3	3	1	NULL	NULL	4	N
4	Nested Loops(Inner Join, OUTER REFERENCES	3	4	3	Nested Loops	Inner Join	OUTER REFERENCES:([Project 1].[dbo].[Schedule].[ld	N
5	Nested Loops(Inner Join, OUTER REFERENC	3	5	4	Nested Loops	Inner Join	OUTER REFERENCES:([Project 1].[dbo].[Hall].[Cinema	N
6	-Nested Loops(Inner Join, OUTER REFERE	3	6	5	Nested Loops	Inner Join	OUTER REFERENCES:([Project 1].[dbo].[Schedule].[ld	N
7	-Clustered Index Scan(OBJECT:([Project	3	8	6	Clustered Index Scan	Clustered Index Scan	OBJECT:([Project 1].[dbo].[Schedule].[PKSchedule	[F
8	-Clustered Index Seek(OBJECT:([Project	3	9	6	Clustered Index Seek	Clustered Index Seek	OBJECT:([Project1].[dbo].[Hall].[PKHall3213E83F	[F
9	IClustered Index Seek(OBJECT:([Project1].[3	10	5	Clustered Index Seek	Clustered Index Seek	OBJECT:([Project 1].[dbo].[Cinema].[PK_Cinema_321	[F
10	IClustered Index Seek (OBJECT:([Project 1].[dbo	3	11	4	Clustered Index Seek	Clustered Index Seek	OBJECT:([Project 1].[dbo].[Movie].[PK_Movie_1A9A	[F

Set statistics io

```
use Project1;
go
set statistics io on;
go
exec GetMovi '2019-05-02';
go
set statistics io off;
go

set statistics io off;
go

Teble 'Movie' Scen count 0 logical reads 10 physical reads 0 read-sheed reads 0 lob logical reads 0 lob physical r
```

Table 'Movie'. Scan count 0, logical reads 10, physical reads 0, read-ahead reads 0, lob logical reads 0, lob physical reads 0, lob read-Table 'Cinema'. Scan count 0, logical reads 10, physical reads 0, read-ahead reads 0, lob logical reads 0, lob physical reads 0, lob read-Table 'Hall'. Scan count 0, logical reads 10, physical reads 0, read-ahead reads 0, lob logical reads 0, lob physical reads 0, lob read-ahead 'Schedule'. Scan count 1, logical reads 2, physical reads 0, read-ahead reads 0, lob logical reads 0, lob physical reads 0, lob read-ahead reads 0, lob logical reads 0, lob physical reads 0, lob read-ahead reads 0, lob logical reads 0, lob physical reads 0, lob read-ahead reads 0, lob logical reads 0, lob physical reads 0, lob read-ahead reads 0, lob logical reads 0, lob physical reads 0, lob read-ahead reads 0, lob logical reads 0, lob physical reads 0, lob read-ahead reads 0, lob logical reads 0, lob physical reads 0, lob read-ahead reads 0, lob logical reads 0, lob physical reads 0, lob read-ahead reads 0, lob logical reads 0, lob physical reads 0, lob read-ahead reads 0, lob logical reads 0, lob physical reads 0, lob read-ahead reads 0, lob logical reads 0, lob physical reads 0, lob read-ahead reads 0, lob logical reads 0, lob physical reads 0, lob read-ahead reads 0, lob logical reads 0, lob physical reads 0, lob read-ahead reads 0, lob logical reads 0, lob physical reads 0, lob read-ahead reads 0, lob logical reads 0, lob physical reads 0, lob read-ahead reads 0, lob logical reads 0, lob physical reads 0, lob read-ahead reads 0, lob logical reads 0, lob physical reads 0, lob read-ahead reads 0, lob logical reads 0, lob physical reads 0, lob read-ahead reads 0, lob logical reads 0, lob read-ahead reads 0, lob logical reads 0, lob physical reads 0, lob read-ahead reads 0, lob logical reads 0, lob physical reads 0, lob read-ahead reads 0, lob logical reads 0, lob physical reads 0, lob read-ahead reads 0, lob logical reads 0, lob physical reads 0, lob logical reads 0, lob physical reads 0, lob read-a

Set statistics time

```
use Project1;
    go
    set statistics time on;
    go
    exec GetMovi '2019-05-02';
   set statistics time off;
    go
0 %

    ■ Results    ■ Messages
  SQL Server parse and compile time:
     CPU time = 0 ms, elapsed time = 0 ms.
  SQL Server parse and compile time:
     CPU time = 0 ms, elapsed time = 42 ms.
   SQL Server Execution Times:
     CPU time = 0 ms, elapsed time = 0 ms.
   SQL Server Execution Times:
     CPU time = 0 ms, elapsed time = 0 ms.
```

SQL Server Execution Times:

SQL Server parse and compile time:

CPU time = 0 ms, elapsed time = 43 ms.

CPU time = 0 ms, elapsed time = 0 ms.

Висновок

На даній лабораторній роботі я навчився аналізувати і оптимізувати виконання запитів.