Performance Engineering example

Pre-req (Setup SQL Server and SSMS)

Setup SQL Server using the below link

https://www.microsoft.com/en-in/download/details.aspx?id=101064

Setup SQL Server Management Studio (IDE) using the below link

https://www.microsoft.com/en-in/download/details.aspx?id=101064

Setup SQL Stress Test using the below link

https://github.com/ErikEJ/SqlQueryStress/releases

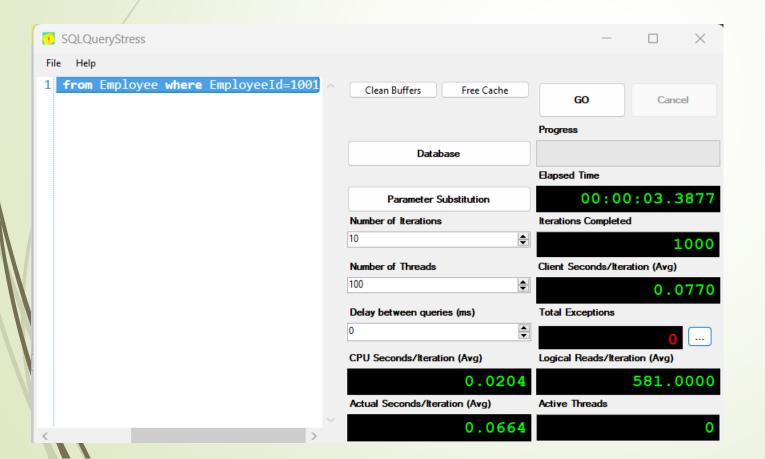
Setup the Table and add the data

Execute the below queries in SSMS

```
create Table Employee(id int identity(1,1) primary key, EmployeeId int, FirstName
Varchar(max), LastName Varchar(max))
Declare @i as int=100
while @i<100000
begin
Declare @FN as varchar(max)='TesttFN'+cast(@i as Varchar(max))
Dec_lare @LN as varchar(max)='TesttLN'+cast(@i as Varchar(max))
in/sert into Employee(EmployeeId, FirstName, LastName) values(@i,@FN,@LN)
set @i=@i+1
end
```

Load Tests without Index Column

Run the below query in SQL Stress test and note the timings select FirstName from Employee where EmployeeId=1001



Load Tests with Index Column

Add an Index on Employee Id and now run the below query in SQL Stress test and note the timings

Create nonclustered index emp_in on Employee(EmployeeId)
select FirstName from Employee where EmployeeId=1001

