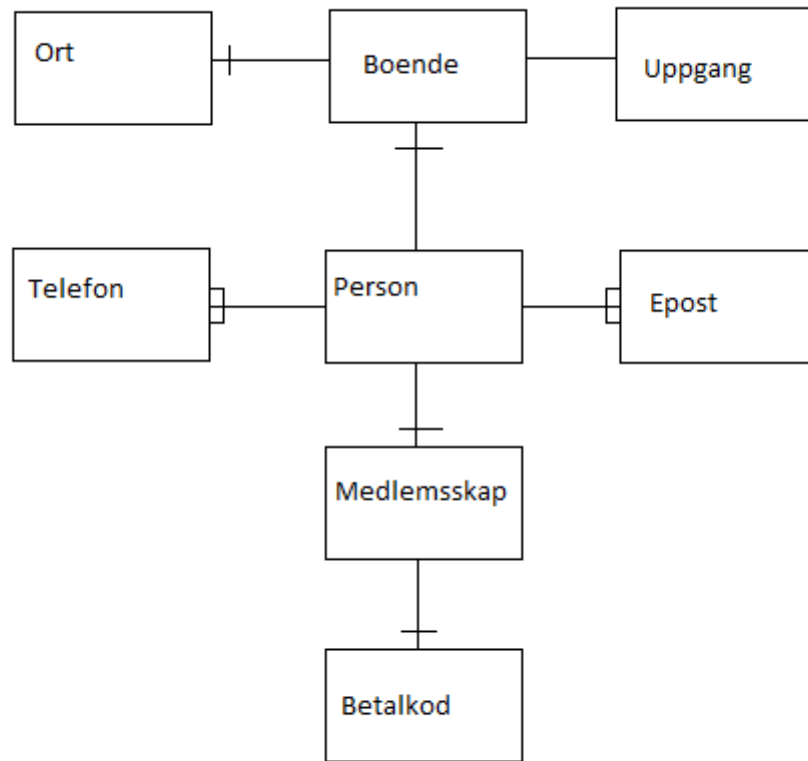
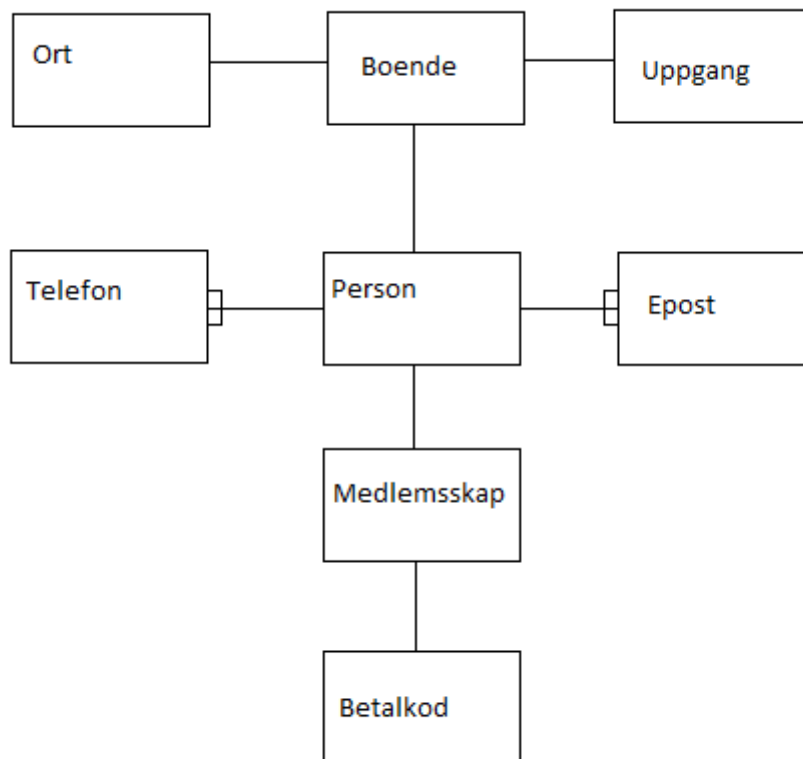


Uppgift	Sql-sats	Execution times 1	Execution times 2
1	<code>SELECT * FROM DemoMedlem.dbo.Medlem</code>	CPU time = 1453 ms, elapsed time = 25279 ms.	CPU time = 1328 ms, elapsed time = 16252 ms.
2	<code>SELECT ENAMN, FNAMN, POSTNR, ORT FROM DemoMedlem.dbo.Medlem</code>	CPU time = 547 ms, elapsed time = 7145 ms.	CPU time = 266 ms, elapsed time = 7181 ms.
3	<code>SELECT * FROM DemoMedlem.dbo.Medlem ORDER BY ENAMN</code>	CPU time = 4781 ms, elapsed time = 18563 ms.	CPU time = 4360 ms, elapsed time = 17159 ms.
4	<code>SELECT * FROM DemoMedlem.dbo.Medlem ORDER BY ENAMN, FNAMN</code>	CPU time = 5063 ms, elapsed time = 18538 ms.	CPU time = 5218 ms, elapsed time = 18290 ms.
5 (note: kraftiga variationer)	<code>SELECT ENAMN, FNAMN, POSTNR, ORT FROM DemoMedlem.dbo.Medlem ORDER BY ENAMN</code>	CPU time = 2313 ms, elapsed time = 2892 ms.	CPU time = 2344 ms, elapsed time = 8763 ms.
6	<code>SELECT ENAMN, FNAMN, POSTNR, ORT FROM DemoMedlem.dbo.Medlem ORDER BY ENAMN, FNAMN</code>	CPU time = 2734 ms, elapsed time = 6191 ms.	CPU time = 2782 ms, elapsed time = 3208 ms.
7	<code>SELECT * FROM DemoMedlem.dbo.Medlem WHERE ORT='Kalmar'</code>	CPU time = 125 ms, elapsed time = 125 ms.	CPU time = 109 ms, elapsed time = 119 ms.
8	<code>SELECT * FROM DemoMedlem.dbo.Medlem WHERE ORT Like 'Kal%'</code>	CPU time = 141 ms, elapsed time = 162 ms.	CPU time = 172 ms, elapsed time = 164 ms.
9	<code>SELECT * FROM DemoMedlem.dbo.Medlem WHERE ORT Like 'Kal%' AND ENAMN Like '%son%' ORDER BY Fastnr</code>	CPU time = 172 ms, elapsed time = 181 ms.	CPU time = 172 ms, elapsed time = 171 ms.
10	<code>SELECT * FROM DemoMedlem.dbo.Medlem WHERE DATEDIFF(DAY, TODATETIMEOFFSET((CAST(ANNDATUM AS VARCHAR)), '+01:00'), CURRENT_TIMESTAMP) < 365 AND ANNDATUM != 0</code>	CPU time = 157 ms, elapsed time = 170 ms.	CPU time = 187 ms, elapsed time = 182 ms.
11	<code>SELECT COUNT(ANNDATUM) AS AntalAnnulerade, YEAR(TODATETIMEOFFSET((CAST(ANNDATUM AS VARCHAR)), '+01:00')) AS Anno, ORT FROM DemoMedlem.dbo.Medlem WHERE ANNDATUM != 0 GROUP BY YEAR(TODATETIMEOFFSET((CAST(ANNDATUM AS VARCHAR)), '+01:00')), ORT</code>	CPU time = 297 ms, elapsed time = 291 ms.	CPU time = 281 ms, elapsed time = 289 ms.
12	<code>SELECT DISTINCT ORT FROM DemoMedlem.dbo.Medlem ORDER BY ORT</code>	CPU time = 375 ms, elapsed time = 374 ms.	CPU time = 359 ms, elapsed time = 359 ms.
13	<code>SELECT * FROM DemoMedlem.dbo.Medlem WHERE Telenr1 != Telenr2</code>	CPU time = 1453 ms, elapsed time = 12600 ms.	CPU time = 1344 ms, elapsed time = 13971 ms.

Konecptuell modell



Fysisk model



Telefon		
ID	Int	
TeleNummer	Int	
<i>PersonID</i> (Index)	Int	

Person		
PersonID	Int	
Fnamn	VARCHAR	63
Enamn (Index)	VARCHAR	63
<i>MedlemID</i> (Index)	Int	
<i>BoendeID</i> (Index)	Int	

Medlemskap		
MedlemID	Int	

Indatum	Date	
Anndatum	Date	
Vervkod	Tinyint	
Betaltom	Date	
Indatum	Date	
Enddatum	Date	
Inpabet	Date	
Tidning	bool	
Förhandl	bool	
Erskortdatum	Date	
Vervdatum	Date	
Huvkortdatum	Date	
<i>Betalkod</i> (Index)	Int	

Boende		
BoendeID	Int	
Gatunamn	Varchar	63
Gatunr	smallint	
Postnr	Int	
<i>OrtID</i> (Index)	Int	
Conamn	Varchar	63
Andrahand	bool	
Fastnr	int	
<i>UppgangID</i> (Index)	Int	

Betalkod		
BetalkodID	Int	
Typ	Varchar	4

Uppgang		
UppgangID	Int	
Typ	Varchar	2

Ort		
OrtID	Int	
Namn	Varchar	63

Epost		
EpostID	Int	
Epost	Varchar	63
<i>PersonID</i> (Index)	Int	