

SQL | Subqueries exercise | Selecting data from a sub query

(<https://www.wiseowl.co.uk/sql/exercises/standard/subqueries/4228/>)

Write a **SELECT** statement to return events from the 3 continents with the fewest events. To do this first write a SELECT query which returns all the continents and events.

```
select c.ContinentName, e.EventName
from [dbo].[tblContinent] as c
inner join [dbo].[tblCountry] as u
on c.[ContinentID] = u.[ContinentID]
inner join [dbo].[tblEvent] as e
on u.[CountryID] = e.CountryID
```

	ContinentName	EventName
1	Europe	Chernobyl
2	North America	Pearl Harbour
3	Europe	World War 1 began
4	Europe	World War 1 ends
5	Europe	The UK declares war on Germany
6	Europe	Liberation of Bergen-Belsen
7	Asia	World War II ends
8	Asia	Hiroshima
9	Not applicable	Asian tsunami
10	Asia	Liberation/fall of Saigon
11	North America	9/11 attacks
12	Europe	Brexit vote
13	Europe	London Olympic games
14	North America	Lehman Brothers collapses
15	Europe	Last edition of "Top of the Pops"
16	Europe	London Eye opens
17	Europe	First Harry Potter Book published

Now underneath write another **SELECT** statement which lists events for the 3 continents with the lowest **COUNT** of events. Put the **COUNT** in the **ORDER BY** clause, not the **SELECT**.

```
select top(3) c.ContinentName
from [dbo].[tblContinent] as c
inner join [dbo].[tblCountry] as u
on c.[ContinentID] = u.[ContinentID]
inner join [dbo].[tblEvent] as e
on u.[CountryID] = e.CountryID
group by c.ContinentName
order by count([EventID]) ASC
```

Results		Messages
ContinentName		
1	Antarctic	
2	South America	
3	Australasia	

Finally use the second **SELECT** as a filter in the first **SELECT**'s **WHERE** clause. To do this use **ContinentName IN** (Sub Query).

```
select c.ContinentName, e.EventName
from [dbo].[tblContinent] as c
inner join [dbo].[tblCountry] as u
on c.[ContinentID] = u.[ContinentID]
inner join [dbo].[tblEvent] as e
on u.[CountryID] = e.CountryID
where c.ContinentName in

(
    select top(3) c.ContinentName
    from [dbo].[tblContinent] as c
    inner join [dbo].[tblCountry] as u
    on c.[ContinentID] = u.[ContinentID]
    inner join [dbo].[tblEvent] as e
    on u.[CountryID] = e.CountryID
    group by c.ContinentName
    order by count([EventID]) ASC
)
```

Results			Messages	
	ContinentName	EventName		
1	South America	Argentina invades the Falklands		
2	Antarctic	Captain Oates leaves his tent for the last time		
3	Australasia	US starts nuclear tests		
4	Australasia	Australia converts from £ to \$		
5	South America	Che Guevara killed in Bolivia		
6	Australasia	Sydney Opera House opens		
7	Australasia	First episode of Neighbours		
8	Australasia	England wins Rugby World Cup		