$$\text{NULLs Examples}$$

```
use CAP

go

if exists (select * 
    from sysobjects
    where id = Object_id('Names') and type in
    ('U','S')
) 
begin
    DROP TABLE Names
end
GO

create table Names(
    pid integer not null,
    fname varchar(20) not null,
    rank integer,
    favorite integer,
    primary key( pid )
)
go

insert into Names( pid, fname, rank, favorite )
values( 1, 'Alan', 12, 42 )
go
insert into Names( pid, fname, rank, favorite )
values( 2, 'Brian', 1, NULL )
go
insert into Names( pid, fname, rank, favorite )
values( 3, 'Max', NULL, 86 )
go
insert into Names( pid, fname, rank, favorite )
values( 4, 'Ben', 4, 2112 )
go
insert into Names( pid, fname, rank, favorite )
values( 5, 'Bond', NULL, 7 )
go
```
```
select *  
from Names  
go
```

<table>
<thead>
<tr>
<th>pid</th>
<th>fname</th>
<th>rank</th>
<th>favorite</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Alan</td>
<td>12</td>
<td>42</td>
</tr>
<tr>
<td>2</td>
<td>Brian</td>
<td>1</td>
<td>NULL</td>
</tr>
<tr>
<td>3</td>
<td>Max</td>
<td>NULL</td>
<td>86</td>
</tr>
<tr>
<td>4</td>
<td>Ben</td>
<td>4</td>
<td>2112</td>
</tr>
<tr>
<td>5</td>
<td>Bond</td>
<td>NULL</td>
<td>7</td>
</tr>
</tbody>
</table>

(5 row(s) affected)

```
select *  
from Names  
order by rank  
go
```

<table>
<thead>
<tr>
<th>pid</th>
<th>fname</th>
<th>rank</th>
<th>favorite</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Max</td>
<td>NULL</td>
<td>86</td>
</tr>
<tr>
<td>5</td>
<td>Bond</td>
<td>NULL</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>Brian</td>
<td>1</td>
<td>NULL</td>
</tr>
<tr>
<td>4</td>
<td>Ben</td>
<td>4</td>
<td>2112</td>
</tr>
<tr>
<td>1</td>
<td>Alan</td>
<td>12</td>
<td>42</td>
</tr>
</tbody>
</table>

(5 row(s) affected)

```
select *  
from Names  
order by rank DESC  
go
```

<table>
<thead>
<tr>
<th>pid</th>
<th>fname</th>
<th>rank</th>
<th>favorite</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Alan</td>
<td>12</td>
<td>42</td>
</tr>
<tr>
<td>4</td>
<td>Ben</td>
<td>4</td>
<td>2112</td>
</tr>
<tr>
<td>2</td>
<td>Brian</td>
<td>1</td>
<td>NULL</td>
</tr>
<tr>
<td>3</td>
<td>Max</td>
<td>NULL</td>
<td>86</td>
</tr>
<tr>
<td>5</td>
<td>Bond</td>
<td>NULL</td>
<td>7</td>
</tr>
</tbody>
</table>

(5 row(s) affected)

```
select avg(rank) as "Average Rank"  
from names  
go
```

```
Average Rank
-----------
5
(1 row(s) affected)
```

```
select avg(favorite)  
from names  
go
```

```
-----------
561
(1 row(s) affected)
```

```
select count(*)  
from names  
go
```

```
-----------
5
(1 row(s) affected)
```
<table>
<thead>
<tr>
<th>SQL Statement</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Select</strong> <code>count(rank)</code> as &quot;Count of rank&quot; from names go</td>
<td>Count of rank 3 (1 row(s) affected)</td>
</tr>
<tr>
<td><strong>Select</strong> <code>count(favorite)</code> as &quot;Count of favorite&quot; from names go</td>
<td>Count of favorite 4 (1 row(s) affected)</td>
</tr>
<tr>
<td><strong>Select</strong> <code>count(fname)</code> as &quot;Count of fname&quot; from names go</td>
<td>Count of fname 5 (1 row(s) affected)</td>
</tr>
<tr>
<td><strong>Select</strong> <code>favorite - rank</code> as &quot;Difference&quot; from names go</td>
<td>Difference 30 NULL NULL 2108 NULL (5 row(s) affected)</td>
</tr>
<tr>
<td><strong>Select</strong> <code>count(Difference)</code> from (select favorite - rank as &quot;Difference&quot; from names) subl</td>
<td>2 (1 row(s) affected)</td>
</tr>
</tbody>
</table>

Warning: Null value eliminated from aggregate.