Week3

Week 3

```
- TLE refers to Time Limit Extended
```

```
Week 3

Meta data about posts

Compare Posts with PostsWithDeleted

Try to implement 'TRIM' function

Join

Common

Inner Join

Left Join

Left Join Update

Gather Data

Save 'JS' to increase speed

Finally Works

Try to add TRIM

Differencr between TRIM
```

Meta data about posts

Database Schema

```
Posts
Total items: 41458190
Id,Body,Title,Tags

PostsWithDeleted
Total items: 51653488
Id,Body,Title,Tags

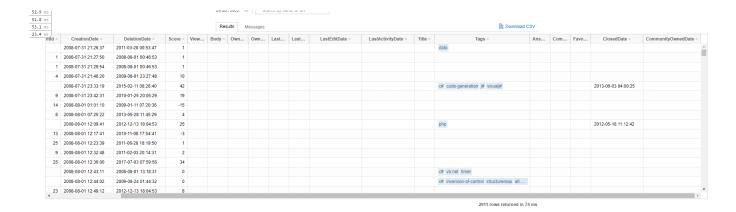
PostHistory(After viewing,maybe not relavent)
Total items: 108471877
Id,PostId,Comment,Text
```

Compare Posts with PostsWithDeleted

```
select * from PostsWithDeleted
except
select * from Posts
```

TLE

```
(select Top 5000 * from PostsWithDeleted pd )
except
(select Top 5000 * from Posts p )
```



Solution
Just use Post.

Try to implement 'TRIM' function

```
select Body from (
SELECT REPLACE(LTRIM(RTRIM(Body)),' ','') as Body
FROM Posts pt) p
```

Join

Common

```
SELECT TOP 1000 c.PostId AS [Post Link], YEAR(C.CreationDate) AS Year, Month(C.CreationDate) AS Month, c.text AS Body FROM Comments C, Posts P
```

```
Where (
    C.Text LIKE '%bastard%' AND
    C.PostID = P.ID AND
    P.ClosedDate IS NULL
)
Order By Year, Month
```

Inner Join

```
select Top 100 p.Id,c.PostId
from Posts p inner join Comments c
on p.Id = c.PostId
order by p.id
```

Left Join

```
select Top 100 p.Id,c.PostId
from Posts p left join Comments c
on p.Id = c.PostId
where p.Body like '%##key1##%'
order by p.id
```

Timeout Expired

Left Join Update

```
select count(*)
from Posts p left join Comments c
on p.Id = c.PostId
```

Gather Data

```
select count(*)
from Posts p left join Comments c
on p.Id = c.PostId
```

result:87141992

```
select count(*)
from Posts p left join Comments c
on p.Id = c.PostId
where
(p.Title like '%##key##%' or p.Title like '%##Method##%') and
p.Body like '%##key##%' and p.Body like '%##Method##%' and
( p.Body like '%js%'or p.Body like '%JS%')
```

```
select count(*)
```

```
from Posts p left join Comments c
on p.Id = c.PostId
where
  (p.Title like '%##key##%' or p.Title like '%##Method##%') and
  (
   (p.Body like '%##key##%' and p.Body like '%##Method##%') or
  (c.Text like '%##key##%' and c.Text like '%##Method##%')
) and
  (( p.Body like '%js%')
  or
  (c.Text like '%js%'))
```

react & render 18106

select *:

TLE

Save 'JS' to increase speed

```
select *
from Posts p left join Comments c
on p.Id = c.PostId
where
(p.Title like '%##key##%' or p.Title like '%##Method##%') and
(
(p.Body like '%##key##%' and p.Body like '%##Method##%') or
(c.Text like '%##key##%' and c.Text like '%##Method##%')
)
```

Finally Works

```
select p.Title,p.CommentCount,p.Body,c.Text
from Posts p left join Comments c
on p.Id = c.PostId
where
(p.Title like '%##key##%' or p.Title like '%##Method##%') and
(
(p.Body like '%##key##%' and p.Body like '%##Method##%') or
(c.Text like '%##key##%' and c.Text like '%##Method##%')
)
```

and

```
select p.Title,p.CommentCount,p.Body,c.Text
from Posts p left join Comments c
on p.Id = c.PostId
where
(p.Title like '%##key##%' or p.Title like '%##Method##%') and
(
(p.Body like '%##key##%' and p.Body like '%##Method##%') or
(c.Text like '%##key##%' and c.Text like '%##Method##%')
)
and
(( p.Body like '%js%')
or
(c.Text like '%js%'))
```

```
select p.Id,p.Title,p.CommentCount,p.Body,c.Text
from Posts p left join Comments c
on p.Id = c.PostId
where
(p.Title like '%##key##%' or p.Title like '%##Method##%') and
(
(p.Body like '%##key##%' and p.Body like '%##Method##%') or
(c.Text like '%##key##%' and c.Text like '%##Method##%')
)
and
(( p.Body like '%js%')
or
(c.Text like '%js%'))
order by p.Id
```

18106 rows (Key = react & Method = render)

Try to add TRIM

```
select p.Id,p.Title,p.CommentCount,p.Body,c.Text
from Posts p left join Comments c
on p.Id = c.PostId
where
(REPLACE(LTRIM(RTRIM(p.Title)),' ','') like '%##key##%' or REPLACE(LTRIM(RTRIM(p.Title)),'
','') like '%##Method##%') and
(
(REPLACE(LTRIM(RTRIM(p.Body)),' ','') like '%##key##%' and REPLACE(LTRIM(RTRIM(p.Body)),'
','') like '%##Method##%') or
(REPLACE(LTRIM(RTRIM(c.Text)),' ','') like '%##key##%' and REPLACE(LTRIM(RTRIM(c.Text)),'
','') like '%##Method##%')
)
and
(( REPLACE(LTRIM(RTRIM(p.Body)),' ','') like '%js%')
or
(REPLACE(LTRIM(RTRIM(c.Text)),' ','') like '%js%'))
order by p.Id
```

18205 rows returned in 256994 ms (Key = react & Method = render)

Data Review:

Not all are related to ReactJs.

Differencr between TRIM

```
(select p.Id,p.Title,p.CommentCount,p.Body,c.Text
from Posts p left join Comments c
on p.Id = c.PostId
where
(REPLACE(LTRIM(RTRIM(p.Title)),' ','') like '%##key##%' or REPLACE(LTRIM(RTRIM(p.Title)),'
 ,'') like '%##Method##%') and
(REPLACE(LTRIM(RTRIM(p.Body)),' ','') like '%##key##%' and REPLACE(LTRIM(RTRIM(p.Body)),'
 ,'') like '%##Method##%') or
(REPLACE(LTRIM(RTRIM(c.Text)),' ','') like '%##key##%' and REPLACE(LTRIM(RTRIM(c.Text)),'
 ,'') like '%##Method##%')
and
(( REPLACE(LTRIM(RTRIM(p.Body)),' ','') like '%js%')
(REPLACE(LTRIM(RTRIM(c.Text)),' ','') like '%js%'))
)
except
select p.Id,p.Title,p.CommentCount,p.Body,c.Text
from Posts p left join Comments c
on p.Id = c.PostId
where
(p.Title like '%##key##%' or p.Title like '%##Method##%') and
(p.Body like '%##key##%' and p.Body like '%##Method##%') or
(c.Text like '%##key##%' and c.Text like '%##Method##%')
and
(( p.Body like '%js%')
or
(c.Text like '%js%'))
```

TLE

Top 1000 still TLE...

select Top 10 * from Posts p
where p.Body like '%##Key##%'
or p.Body like '%##Method##%'