**Schema Notes**As you’ll see in my schema, I have not defined any relationships between the tables, and it is because I am not convinced the tables contain any primary keys. I have tested the following columns within tables to identify if any relationships exit.   
  
Test 1: all\_sessions table, ‘fullvisitorid’ column  
  
Column ‘fullvisitorid’ is common to two tables and one would assume it’s the primary key in one table and foreign key in the other.   
I tested my hypothesis using the codes below:   
  
Query 1.

```sql  
SELECT \*   
FROM all\_sessions  
```  
This query retrieves a result set for about 15134 rows  
  
Query 2.  
  
``` sql  
 SELECT \*   
 FROM all\_sessions   
 WHERE fullvisitorid IS NULL  
```  
This query retrieves no result meaning there are no fullvisitorid values that are null.  
  
Query 3.  
  
```sql  
 SELECT distinct fullvisitorid  
 FROM all\_sessions  
```  
This query retrieves a result set of 14223 values.   
  
  
This test proves that there are duplicate values in the fullvisitorid column and therefore it cannot be the primary key to the sessions table.   
Test 2  
  
I conducted a similar test for analytics table which also contains the fullvisitorid column. There were about 4301122 rows of which only 120018 had unique values and there were no nulls. Thereby I concluded that this column cannot serve the primary key for analytics table.   
  
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A similar test was performed for products table, sales\_by\_sku and sales\_report.