

Num.	Story	Query	Dataset
1	Atypical country	<pre> BEGIN CHILDREN {A1, A2} A1 LIKE [G,.*] and CHILDREN &lt;B1, B2&gt; B1 LIKE [F,country,eq,(?&lt;Country&gt;.*)] B2 LIKE [F,country,ne,(?&lt;Country&gt;.*)] A2 LIKE [G,.*] and CHILDREN &lt;C1, C2&gt; C1 LIKE [F,country,eq,(?&lt;Country&gt;.*)] C2 LIKE [F,country,ne,(?&lt;Country&gt;.*)] </pre>	NETFLIX
2	Successful TV-shows	<pre> BEGIN CHILDREN &lt;A1&gt; A1 LIKE [F,type,eq,TV Show] and CHILDREN &lt;B1&gt; B1 LIKE [F,duration,ge,2] and CHILDREN &lt;C1, C2&gt; C1 LIKE [G,(?&lt;col1&gt;.*),.*] C2 LIKE [F,(?&lt;col1&gt;.*),.*] and CHILDREN &lt;D1, D2&gt; D1 LIKE [G,(?&lt;col2&gt;.*),.*] D2 LIKE [F,(?&lt;col2&gt;.*),.*] </pre>	NETFLIX
3	Compare titles of three different actors	<pre> A1 LIKE [F,cast,contains,.*] and SIBLINGS {A2,A3} and CHILDREN {B1} B1 LIKE [G,(?&lt;col&gt;.*),(?&lt;func&gt;.*),(?&lt;agg&gt;.*)] A2 LIKE [F,cast,contains,.*] and CHILDREN {B2} B2 LIKE [G,(?&lt;col&gt;.*),(?&lt;func&gt;.*),(?&lt;agg&gt;.*)] A3 LIKE [F,cast,contains,.*] and CHILDREN {B3} B3 LIKE [G,(?&lt;col&gt;.*),(?&lt;func&gt;.*),(?&lt;agg&gt;.*)] </pre>	NETFLIX
4	Investigate movies' duration	<pre> BEGIN CHILDREN {A1} A1 LIKE [F,type,eq,Movie] and CHILDREN &lt;B1, B2&gt; B1 LIKE [F,.*] and DESCENDANTS {D1,*} D1 LIKE [G,.*,AVG,duration] B2 LIKE [F,.*] and DESCENDANTS {D2,*} D2 LIKE [G,.*,AVG,duration] </pre>	NETFLIX
5	Properties of summer-months flights	<pre> BEGIN CHILDREN &lt;A1,A2,A3&gt; A1 LIKE [G,(?&lt;col1&gt;.*),.*] A2 LIKE [G,(?&lt;col2&gt;.*),.*] A3 LIKE [F,Month,ge,7] and CHILDREN &lt;B1&gt; B1 LIKE [F,Month,le,8] and CHILDREN &lt;C3,C4,*&gt; C3 LIKE [G,(?&lt;col1&gt;.*),.*] C4 LIKE [G,(?&lt;col2&gt;.*),.*] </pre>	FLIGHTS
6	Explore reasons for delay	<pre> BEGIN CHILDREN &lt;A1,A2,A3,A4&gt; A1 LIKE [G,DelayReason,.*] A2 LIKE [F,DelayReason,eq,.*] and CHILDREN {B2} B2 LIKE [G,.*] A3 LIKE [F,DelayReason,eq,.*] and CHILDREN {B3} B3 LIKE [G,.*] A4 LIKE [F,DelayReason,eq,.*] and CHILDREN {B4} B4 LIKE [G,.*] </pre>	FLIGHTS
7	What type of flights have long delays	<pre> BEGIN CHILDREN {A1} A1 LIKE [F,DepartureDelay,eq,LARGE_DELAY] and CHILDREN &lt;B1,*&gt; B1 LIKE [G,(?&lt;col&gt;.*),.*] and SIBLINGS {B2, B3, B4} B2 LIKE [F,(?&lt;col&gt;.*),eq,.*] B3 LIKE [F,(?&lt;col&gt;.*),eq,.*] B4 LIKE [F,(?&lt;col&gt;.*),eq,.*] </pre>	FLIGHTS
8	What flights are delayed due to weather?	<pre> BEGIN DESCENDANTS {D1,*} D1 LIKE [F,DelayReason,eq,WEATHER] and CHILDREN {B1, B2} B1 LIKE [G,.*] B2 LIKE [G,.*] </pre>	FLIGHTS
9	Properties of apps with ≥ 1M installs	<pre> BEGIN CHILDREN &lt;A1,A2&gt; A1 LIKE [G,(?&lt;col&gt;.*),(?&lt;func&gt;.*),(?&lt;agg&gt;.*)] and CHILDREN {B1} B1 LIKE [G,installs,.*] and CHILDREN {} A2 LIKE [F,installs,ge,1000000] and DESCENDANTS {D1,*} D1 LIKE [G,(?&lt;col&gt;.*),(?&lt;func&gt;.*),(?&lt;agg&gt;.*)] </pre>	PLAY STORE
10	Compare highly-rated with low-rated apps	<pre> BEGIN CHILDREN &lt;A1,A2&gt; A1 LIKE [F,rating,le,2.5] and CHILDREN &lt;C1,C2&gt; C1 LIKE [G,(?&lt;col1&gt;.*),(?&lt;func1&gt;.*),(?&lt;agg1&gt;.*)] C2 LIKE [G,(?&lt;col2&gt;.*),(?&lt;func2&gt;.*),(?&lt;agg2&gt;.*)] A2 LIKE [F,rating,ge,4.7] and CHILDREN &lt;D1,D2,*&gt; D1 LIKE [G,(?&lt;col1&gt;.*),(?&lt;func1&gt;.*),(?&lt;agg1&gt;.*)] D2 LIKE [G,(?&lt;col2&gt;.*),(?&lt;func2&gt;.*),(?&lt;agg2&gt;.*)] </pre>	PLAY STORE
11	Explore apps with backwards compatibility	<pre> BEGIN CHILDREN &lt;A1,A2,A3,A4&gt; A1 LIKE [G,.*] and CHILDREN &lt;B1&gt; B1 LIKE [G,min_android_ver,CNT,app_id] and CHILDREN {} A2 LIKE [G,.*] and CHILDREN &lt;C1,*&gt; C1 LIKE [G,min_android_ver,.*] A3 LIKE [F,(?&lt;col&gt;.*),.*] and CHILDREN &lt;D1,*&gt; D1 LIKE [G,min_android_ver,.*] A4 LIKE [F,(?&lt;col&gt;.*),.*] and CHILDREN &lt;E1,*&gt; E1 LIKE [G,min_android_ver,.*] </pre>	PLAY STORE
12	Compare paid apps to free apps	<pre> BEGIN CHILDREN &lt;A1,A2&gt; A1 LIKE [G,.*] and CHILDREN &lt;B1&gt; B1 LIKE [G,.*] and CHILDREN &lt;D1, D2&gt; D1 LIKE [F,type,eq,Paid] D2 LIKE [F,type,eq,Free] A2 LIKE [G,.*] and CHILDREN &lt;C1, C2&gt; C1 LIKE [F,type,eq,Paid] C2 LIKE [F,type,eq,Free]<sup>1</sup> </pre>	PLAY STORE

**Table 1: Different DASL Queries**