Didn't know where to start

https://cloud.google.com/datalab/ took me to a billing screen

went to documentation https://cloud.google.com/datalab/overview

navigated to https://datalab.cloud.google.com/

---

Google Cloud Datalab

Explore, transform, analyze and visualize your data, using Google Cloud Platform.

Select Cloud Project: **My First Project**

Start Datalab Deploy Datalab Manage Datalab

Cloud Datalab will be deployed as an AppEngine application module in the selected project. The Google Compute Engine and BigQuery APIs must be enabled for the project, and you must be authorized to use the project as an owner or editor.

The following additions will be made to the project:

- An AppEngine module named "datalab". This can be managed within the AppEngine section in the Developer Console. AppEngine charges will accrue.

- A Compute Engine network named "datalab" will be added if it doesn't exist.

- A branch named "datalab" will be added to the git repository associated with the project, and is browsable within the Source section in Developer Console to contain samples, docs and your notebooks.
Cloud Datalab is being installed into the 'thematic-lore-110201' project. Note that this deployment can take more than 10 minutes while the AppEngine application is provisioned and started.

Thanks for waiting.

(took about 8 minutes)
Explore, transform, analyze and visualize your data, using Google Cloud Platform.

Cloud Datalab was successfully deployed. Details can be found in the deployment log.


Example notebooks included
I want to do this with my own Google Analytics data... guess I need BigQuery?
Guess I need a dataset.... How to import? Tiny dropdown next to “My First Project”

http://www.lunametrics.com/blog/2014/01/27/google-analytics-bigquery-whys-hows/

http://www.lunametrics.com/blog/2013/05/16/google-analytics-premium-bigquery/

... only allowed for Google Analytics Premium

https://support.google.com/analytics/answer/3437618?hl=en
Decided to go with Natality data from public data set built in
### Table Details: Births_1980_1984

**Schema**

<table>
<thead>
<tr>
<th>Field</th>
<th>Type</th>
<th>Nullable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>year</td>
<td>INTEGER</td>
<td>NULLABLE</td>
<td>Describe this field...</td>
</tr>
<tr>
<td>month</td>
<td>INTEGER</td>
<td>NULLABLE</td>
<td>Describe this field...</td>
</tr>
<tr>
<td>day</td>
<td>INTEGER</td>
<td>NULLABLE</td>
<td>Describe this field...</td>
</tr>
<tr>
<td>wday</td>
<td>INTEGER</td>
<td>NULLABLE</td>
<td>Describe this field...</td>
</tr>
<tr>
<td>state</td>
<td>STRING</td>
<td>NULLABLE</td>
<td>Describe this field...</td>
</tr>
<tr>
<td>is_male</td>
<td>BOOLEAN</td>
<td>NULLABLE</td>
<td>Describe this field...</td>
</tr>
<tr>
<td>gestation_weeks</td>
<td>INTEGER</td>
<td>NULLABLE</td>
<td>Describe this field...</td>
</tr>
<tr>
<td>mother_age</td>
<td>INTEGER</td>
<td>NULLABLE</td>
<td>Describe this field...</td>
</tr>
<tr>
<td>father_age</td>
<td>INTEGER</td>
<td>NULLABLE</td>
<td>Describe this field...</td>
</tr>
<tr>
<td>apgar_1min</td>
<td>INTEGER</td>
<td>NULLABLE</td>
<td>Describe this field...</td>
</tr>
<tr>
<td>apgar_5min</td>
<td>INTEGER</td>
<td>NULLABLE</td>
<td>Describe this field...</td>
</tr>
<tr>
<td>weight_pounds</td>
<td>FLOAT</td>
<td>NULLABLE</td>
<td>Describe this field...</td>
</tr>
</tbody>
</table>
Seems each bigquery query needs to be in its own ipython cell or won’t run

Had some problems updating... would timeout and had to stop, close, and reopen everything.

Exported to HTML, had to replace Google charts w/static images.

Final Test Notebooks:
