Wikipedia Data Crunch

Using Big Data Tools to Analyze Our Collective Curiosity

Analytics Data Used

- Clickstream Data
 - https://meta.wikimedia.org/wiki/Research:Wikipedia_clickstream
 - O Data Explanation: https://dumps.wikimedia.org/other/clickstream/readme.html
- Pageview Data
 - https://wikitech.wikimedia.org/wiki/Analytics/Data_Lake/Traffic/Pageviews
 - o Data Explanation: https://dumps.wikimedia.org/other/pageviews/readme.html
- Revision History
 - https://wikitech.wikimedia.org/wiki/Analytics/Data_Lake/Edits/Mediawiki_history_dumps#Technical_Documentation
 - O Data Explanation: https://dumps.wikimedia.org/other/mediawiki_history/readme.html

Question 1:

Which English wikipedia article got the most traffic on October 20, 2020?

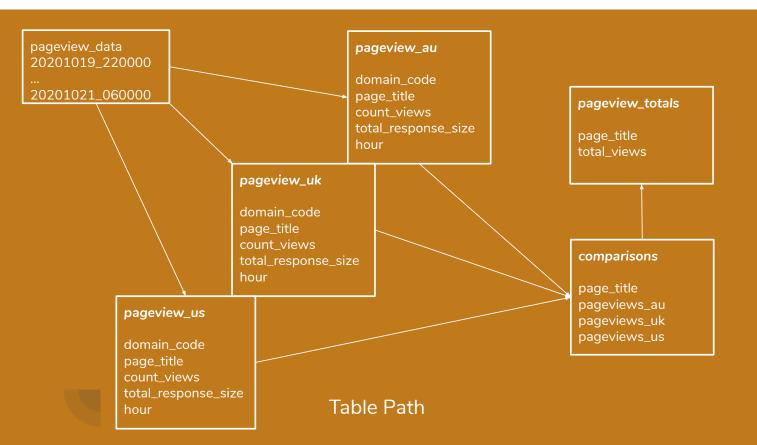
Methodology

- 1. Gather pageview data for the given time span.
- 2. Aggregate pageviews for each page.
- 3. Determine non-trivial highest traffic page.



Assumptions

- Use the time span for which the three anglophone countries may be using Wikipedia on 10/20/2020.
 - This span is discussed in a later question.
- Wikipedia's landing page (Main Page), Special: Search, and Hyphen-Minus are considered trivial in pageview ranking.
 - For a discussion on why hyphen-minus appears at the top of the pageview rankings, check here: https://www.reddit.com/r/wikipedia/comments/fnwfop/aside_f rom_the_main_page_the_most_viewed_page_on/



```
0: jdbc:hive2://> SELECT *
. . . . . . . > FROM total_views
. . . . . . . > ORDER BY total_views DESC
. . . . . . . > LIMIT 20;
```

SQL Query

```
Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 6.7 sec HDFS Read: 157139486 HDFS Write: 769 SUCCESS
Total MapReduce CPU Time Spent: 6 seconds 700 msec
OK
           total_views.page_title
                                             | total_views.total_views
  Main_Page
                                               7986969
  Special:Search
                                               2057872
                                               729654
  Jeffrey_Toobin
                                               418944
  Sokushinbutsu
                                               300123
  The_Haunting_of_Bly_Manor
                                               267252
  C._Rajagopalachari
                                               218431
  Chicago_Seven
Robert_Redford
                                               218337
                                               209727
  Bible
                                               206792
  Jeff_Bridges
                                               179674
  The_Trial_of_the_Chicago_7
                                               165882
  Abbie_Hoffman
                                               162057
  Deaths_in_2020
                                               154081
                                               145773
  Harshad_Mehta
  QAnon
                                               137275
  Hunter_Biden
                                               132765
  Joe_Biden
                                               131127
  2016_United_States_presidential_election
                                               130401
  Tom_Hayden
                                               128877
20 rows selected (16.611 seconds)
```

Question 2:

What English wikipedia article has the largest fraction of its readers follow an internal link to another wikipedia article?

Methodology

- 1. Determine the number of linked views for each page (internal and external).
- 2. Determine the number of internal links that a page spawns.
- 3. Divide number of internal links by total linked views.



Assumptions

- Some pages receive fewer linked views than the number of link clicks they generate. This could be because one viewer is clicking on multiple links in a page, or it could be incompleteness of the data.
 - For analysis purposes anything with a ratio higher than 300% (i.e. three link clicks for every viewer) will be discarded.
 - A better analysis methodology would be to gather historic pageview data for the time period covered in the clickstream data, but here we'll work with the data given.
- Since very low numbers of total traffic will cause artificially high ratios, only pages with more than 3000 total traffic links will be considered.

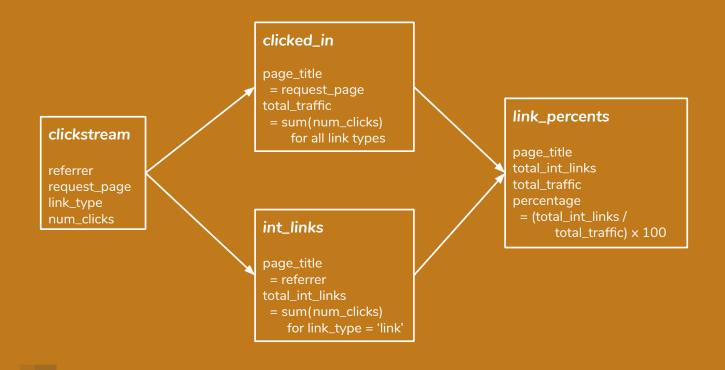


Table Path

```
0: jdbc:hive2://> SELECT *
. . . . . . . . > FROM link_percents
. . . . . . . . > WHERE percentage <= 300
. . . . . . . . > AND total_traffic > 3000
. . . . . . . . > ORDER BY percentage DESC
. . . . . . . . > LIMIT 20;
```

SQL Query

```
Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 5.86 sec
                                                              HDFS Read: 68589032 HDFS Write: 1525 SUCCESS
Total MapReduce CPU Time Spent: 5 seconds 860 msec
OK
                                                                                 | link_percents.total_traffic | link_percents.percentage
               link_percents.page_title
                                                      | link_percents.int_links
  List_of_World_War_II_battles
                                                        40435
                                                                                   13767
                                                                                                                   293.71
  List_of_wars_involving_the_Ottoman_Empire
                                                        9168
                                                                                   3124
                                                                                                                   293.47
                                                                                   11316
                                                                                                                   287.77
  List_of_people_who_died_by_hanging
                                                        32564
  List_of_interments_at_Forest_Lawn_Memorial_Park_(Hollywood_Hills) | 43431
                                                                                                 15098
                                                                                                                                287.66
  List_of_Subaru_vehicles
List_of_land_vehicles_of_the_U.S._Armed_Forces
                                                                                   3160
                                                                                                                   286.58
                                                        9056
                                                        9287
                                                                                   3316
                                                                                                                   280.07
  List_of_current_NFC_team_rosters
                                                        27445
                                                                                    9808
                                                                                                                   279.82
  List_of_premature_professional_wrestling_deaths
                                                        113946
                                                                                   40851
                                                                                                                   278.93
  List_of_armoured_fighting_vehicles_by_country
                                                        13639
                                                                                   4930
                                                                                                                   276.65
  List_of_wars:_before_1000
                                                        15688
                                                                                   5679
                                                                                                                   276.25
  List_of_German_military_equipment_of_World_War_II
                                                        45359
                                                                                   16476
                                                                                                                   275.30
                                                                                   6706
  List_of_critically_endangered_mammals
                                                        18398
                                                                                                                   274.35
  List_of_rotorcraft
                                                        9527
                                                                                   3494
                                                                                                                   272.67
  List_of_second-generation_National_Basketball_Association_players | 14948
                                                                                                 | 5511
                                                                                                                                271.24
                                                                                                                 270.64
  List_of_anti-aircraft_weapons
                                                      14907
                                                                                   5508
  British_Commonwealth_armoured_fighting_vehicles_of_World_War_II | 9705
                                                                                               3588
                                                                                                                               270.48
                                                                                       12798
                                                                                                                      270.38
  List_of_child_abuse_cases_featuring_long-term_detention | 34603
                                                                                                                     270.06
  List_of_baseball_players_who_died_during_their_careers | 24378
                                                                                      9927
  List_of_pornographic_performers_by_decade
                                                        467454
                                                                                   173587
                                                                                                                   269.29
                                                                                   19095
                                                                                                                   268.98
  Types_of_swords
                                                        51361
20 rows selected (13.534 seconds)
```

Question 3:

What series of wikipedia articles, starting with Hotel California, keeps the largest fraction of its readers clicking on internal links?

Methodology

- 1. Gather all pages linked to from the "home page".
- 2. Join the click_stream table to the link_percentages table.
- 3. Order the linked pages by their percentage of internal links.
- 4. Make the top page our new "home page".
- 5. Repeat.



Assumptions

 Again, low total traffic will result in artificially high link to viewer ratios, but by ordering the results by their link percentage and limiting the query to the first 20 results we should avoid any trivially high-ratio pages.

```
Stage-Stage-1: Map: 7 Reduce: 6 Cumulative CPU: 80.75 sec HDFS Read: 1491015395 HDFS Write: 3877 SUCCESS Stage-Stage-2: Map: 1 Reduce: 1 Cumulative CPU: 2.2 sec HDFS Read: 12794 HDFS Write: 873 SUCCESS
Total MapReduce CPU Time Spent: 1 minutes 22 seconds 950 msec
OK
                request
                                        | lp.percentage |
  Eagles_(band)
  Jethro_Tull_(band)
                                          87.02
  The_Twilight_Zone_(1959_TV_series)
                                          79.53
  Steely_Dan
                                          79.13
  American_Horror_Story:_Hotel
                                          74.29
  Cameron_Crowe
                                          67.32
  Desperado
                                          64.56
  Anton_LaVey
                                          63.33
  Hotel_California_(disambiguation)
                                          61.80
  John_Fowles
                                          61.64
  Mercedes-Benz
                                          57.12
  The_Big_Lebowski
                                          55.92
  20th_Annual_Grammy_Awards
                                          54.60
  Close_Encounters_of_the_Third_Kind
                                          53.43
                                                                            0: jdbc:hive2://> SELECT request, lp.percentage
  The_Royal_Scam
                                          52.34
  Grammy_Award_for_Record_of_the_Year
                                          49.86
                                                                                                   > FROM click_stream
  Taxi_Driver
                                          49.71
                                                                                                   > JOIN link_percents AS lp
  Church_of_Satan
                                          44.97
  Hotel_California_(Eagles_album)
                                          44.90
                                                                                                         ON request = lp.page_title
  Private_Times...and_the_Whole_9!
                                          44.33
                                                                                                   > WHERE prev = 'Hotel_California'
                                                                                                   > ORDER BY lp.percentage DESC
20 rows selected (45.603 seconds)
                                                                               . . . . . . . > LIMIT 20;
```

Step 1: Hotel_California

```
Stage-Stage-1: Map: 7 Reduce: 6
                                Cumulative CPU: 79.81 sec HDFS Read: 1491015356 HDFS Write: 8190 SUCCESS
Stage-Stage-2: Map: 1 Reduce: 1 Cumulative CPU: 2.2 sec HDFS Read: 17107 HDFS Write: 773 SUCCESS
Total MapReduce CPU Time Spent: 1 minutes 22 seconds 10 msec
OK
               request
                                   | lp.percentage
  Eagles_discography
                                     125.90
  The_Rolling_Stones
                                     122.16
  Journey_(band)
                                     117.21
  The_Beach_Boys
                                     116.20
  Aerosmith
                                     112.27
  Deep_Purple
                                     111.90
  The_Doors
                                     106.48
  Pink_Floyd
                                     106.31
  Yes_(band)
                                     106.28
  Earth,_Wind_&_Fire
                                     105.49
  Led_Zeppelin
                                     104.30
  Emerson,_Lake_&_Palmer
                                     103.93
  The_Beatles
                                     101.66
  Fleetwood_Mac
                                     98.28
                                                                  0: jdbc:hive2://> SELECT request, lp.percentage
  Guns_N'_Roses
                                     97.93
  Grammy_Award_for_Album_of_the_Year
                                     97.60
                                                                          . . . . . > FROM click_stream
  Queen_(band)
                                     95.19
                                                                            . . . . > JOIN link_percents AS lp
  Bee Gees
                                     89.11
                                                                                            ON request = lp.page_title
  Crosby,_Stills,_Nash_&_Young
                                     88.70
  The_Byrds
                                     83.16
                                                                                  . . > WHERE prev = 'Eagles_(band)'
                                                                                    . > ORDER BY lp.percentage DESC
20 rows selected (46.121 seconds)
                                                                          . . . . . > LIMIT 20;
```

Step 2: Eagles_(band)

```
Stage-Stage-1: Map: 7 Reduce: 6 Cumulative CPU: 80.12 sec
Stage-Stage-2: Map: 1 Reduce: 1 Cumulative CPU: 2.26 sec
                                                            HDFS Read: 1491015421 HDFS Write: 3066 SUCCESS
                                                             HDFS Read: 11983 HDFS Write: 970 SUCCESS
Total MapReduce CPU Time Spent: 1 minutes 22 seconds 380 msec
OK
                 request
                                         | lp.percentage
  Olivia_Newton-John_albums_discography
                                          154.61
                                           146.68
  Electric_Light_Orchestra_discography
  Earth,_Wind_&_Fire_discography
                                          144.03
  Linda_Ronstadt_discography
                                           133.11
  Led_Zeppelin_discography
                                          127.62
  Garth_Brooks_discography
                                          107.38
  Eagles_(band)
                                           96.62
  Don_Henley_discography
                                          86.19
  Eagles_(box_set)
                                          66.37
  Selected_Works:_1972-1999
                                           55.58
  The_Very_Best_of_the_Eagles
                                           54.93
  Eagles_Live
                                          54.11
  Eagles_Greatest_Hits,_Vol._2
                                           53.78
  On_the_Border
                                          51.98
                                                                      0: jdbc:hive2://> SELECT request, lp.percentage
  Adult_Contemporary_(chart)
                                           50.01
  The_Very_Best_Of_(Eagles_album)
                                           46.34
                                                                                 . . . . > FROM click_stream
  One_of_These_Nights
                                          46.29
                                                                                           > JOIN link_percents AS lp
  Hotel_California_(Eagles_album)
                                          44.90
                                                                                                 ON request = lp.page_title
  Farewell_1_Tour:_Live_from_Melbourne
                                           44.84
  Hell_Freezes_Over
                                          43.70
                                                                                    . . . > WHERE prev = 'Eagles_discography'
                                                                                         . > ORDER BY lp.percentage DESC
20 rows selected (47.444 seconds)
                                                                         . . . . . . > LIMIT 20;
```

Step 3: Eagles_discography

```
Stage-Stage-1: Map: 7 Reduce: 6
                                Cumulative CPU: 77.98 sec
                                                         HDFS Read: 1491015668 HDFS Write: 2819 SUCCESS
Stage-Stage-2: Map: 1 Reduce: 1 Cumulative CPU: 2.26 sec HDFS Read: 11736 HDFS Write: 1015 SUCCESS
Total MapReduce CPU Time Spent: 1 minutes 20 seconds 240 msec
OK
                     request
                                                 | lp.percentage
  Olivia_Newton-John_singles_discography
                                                   78.57
  One_Woman's_Live_Journey
                                                   76.09
  Xanadu_(soundtrack)
                                                   57.34
  Highlights_from_The_Main_Event
                                                   56.36
  Clearly_Love
                                                   49.88
                                                   48.62
  Love_Performance
  Don't_Stop_Believin'_(album)
                                                   46.97
  Olivia's_Greatest_Hits_Vol._2
                                                  45.79
  Grease:_The_Original_Soundtrack_from_the_Motion_Picture | 45.44
  Back_with_a_Heart
  Long_Live_Love_(album)
                                                   41.95
  Back_to_Basics:_The_Essential_Collection_1971-1992 |
                                                   41.43
  Olivia_Newton-John
  Two of a Kind (soundtrack)
                                         0: jdbc:hive2://> SELECT request, lp.percentage
  Gaia:_One_Woman's_Journey
                                          . . . . . . . > FROM click_stream
  Making_a_Good_Thing_Better
  Physical_(album)
                                              . . . . . > JOIN link_percents AS lp
  Come_On_Over_(Olivia_Newton-John_album)
                                                                   ON request = lp.page_title
  Have_You_Never_Been_Mellow
  If_You_Love_Me,_Let_Me_Know
                                                         . . > WHERE prev = 'Olivia_Newton-John_albums_discography'
                                                           . > ORDER BY lp.percentage DESC
20 rows selected (45.629 seconds)
                                                   . . . . > LIMIT 20;
```

Step 4: Olivia_Newton-John_albums_discography

```
Stage-Stage-1: Map: 7 Reduce: 6
                               Cumulative CPU: 79.99 sec HDFS Read: 1491015681 HDFS Write: 4016 SUCCESS
Stage-Stage-2: Map: 1 Reduce: 1 Cumulative CPU: 2.5 sec HDFS Read: 12933 HDFS Write: 991 SUCCESS
Total MapReduce CPU Time Spent: 1 minutes 22 seconds 490 msec
OK
                                                 | lp.percentage
                     request
 Olivia_Newton-John_albums_discography
                                                   154.61
  Xanadu_(soundtrack)
                                                   57.34
                                                   49.88
 Clearly_Love
  Don't_Stop_Believin'_(album)
                                                   46.97
 Olivia's_Greatest_Hits_Vol._2
                                                   45.79
  Grease:_The_Original_Soundtrack_from_the_Motion_Picture | 45.44
  Tied_Up
                                                   45.38
 Back_with_a_Heart
                                                   44.20
 After_Dark_(Andy_Gibb_album)
                                                   42.12
  Long_Live_Love_(album)
                                                   41.95
 Back_to_Basics:_The_Essential_Collection_1971-1992
                                                   41.43
 Olivia_Newton-John
                                                   40.47
  Two_of_a_Kind_(soundtrack)
                                                   40.45
 Gaia:_One_Woman's_Journey
                                        0: jdbc:hive2://> SELECT request, lp.percentage
  Making_a_Good_Thing_Better
  Physical_(album)
                                                    . . . > FROM click_stream
  Come_On_Over_(Olivia_Newton-John_album)
                                                            > JOIN link_percents AS lp
  Have_You_Never_Been_Mellow
                                                                 ON request = lp.page_title
  If_You_Love_Me,_Let_Me_Know
  Totally_Hot
                                                         . > WHERE prev = 'Olivia_Newton-John_singles_discography'
                                                       . . > ORDER BY lp.percentage DESC
20 rows selected (46.544 seconds)
                                            . . . . . . > LIMIT 20;
```

Step 5: Olivia_Newton-John_singles_discography

```
Stage-Stage-1: Map: 7 Reduce: 6
                                Cumulative CPU: 78.92 sec
                                                          HDFS Read: 1491015434 HDFS Write: 1601 SUCCESS
Stage-Stage-2: Map: 1 Reduce: 1 Cumulative CPU: 2.18 sec
                                                          HDFS Read: 10518 HDFS Write: 987 SUCCESS
Total MapReduce CPU Time Spent: 1 minutes 21 seconds 100 msec
OK
                     request
                                                  | lp.percentage
                                                    88.92
  A_Box_of_Their_Best
  Four_Light_Years
                                                    88.22
  Electric_Light_Orchestra
                                                    87.41
  The_Tubes
                                                    64.49
  Discovery_(Electric_Light_Orchestra_album)
                                                    51.67
  Time_(ELO_album)
                                                    45.26
  Xanadu_(film)
                                                    45.22
  Olivia_Newton-John
                                                    40.47
  Physical_(album)
                                                    38.93
  Totally_Hot
                                                  37.02
  Xanadu_(Olivia_Newton-John_and_Electric_Light_Orchestra_song) | 35.11
  All_Over_the_World_(Electric_Light_Orchestra_song) | 32.39
  Suddenly_(Olivia_Newton-John_and_Cliff_Richard_song) | 32.08
  Musical_film
                                                    30.82
                                                            0: jdbc:hive2://> SELECT request, lp.percentage
  Cliff_Richard
                                                   30.30
                                                                   . . . . > FROM click_stream
  Magic_(Olivia_Newton-John_song)
                                                    30.29
  I'm_Alive_(Electric_Light_Orchestra_song)
                                                    29.18
                                                                                > JOIN link_percents AS lp
  James_Newton_Howard
                                                    28.56
                                                                                     ON request = lp.page_title
  Gene_Kelly
                                                    28.17
  Don't_Walk_Away_(Electric_Light_Orchestra_song)
                                                   26.43
                                                                             . > WHERE prev = 'Xanadu_(soundtrack)'
                                                                                > ORDER BY lp.percentage DESC
20 rows selected (46.459 seconds)
                                                                      . . . . > LIMIT 20;
```

Step 6: Xanadu_(soundtrack)

```
Stage-Stage-1: Map: 7 Reduce: 6
                                  Cumulative CPU: 77.32 sec
                                                              HDFS Read: 1491015434 HDFS Write: 786 SUCCESS
Stage-Stage-2: Map: 1 Reduce: 1
                                  Cumulative CPU: 2.34 sec
                                                             HDFS Read: 9703 HDFS Write: 282 SUCCESS
Total MapReduce CPU Time Spent: 1 minutes 19 seconds 660 msec
OK
                            | lp.percentage
          request
 Four_Light_Years
                             88.22
 Electric_Light_Orchestra
                             87.41
 Xanadu_(soundtrack)
                             57.34
 ELO's_Greatest_Hits
                             35.19
                                                 0: jdbc:hive2://> SELECT request, lp.percentage
 Doin'_That_Crazy_Thing
                             15.46
                                                           . . . > FROM click_stream
5 rows selected (46.131 seconds)
                                                               . > JOIN link_percents AS lp
                                                                     ON request = lp.page_title
                                                                 > WHERE prev = 'A_Box_of_Their_Best'
                                                               . > ORDER BY lp.percentage DESC
                                                           . . . > LIMIT 20;
```

Step 7: A_Box_of_Their_Best

```
Stage-Stage-1: Map: 7 Reduce: 6
                                  Cumulative CPU: 77.8 sec
                                                             HDFS Read: 1491015383 HDFS Write: 701 SUCCESS
Stage-Stage-2: Map: 1 Reduce: 1
                                  Cumulative CPU: 2.2 sec
                                                            HDFS Read: 9588 HDFS Write: 203 SUCCESS
Total MapReduce CPU Time Spent: 1 minutes 20 seconds 0 msec
                            | lp.percentage
           request
  Electric_Light_Orchestra
                              87.41
  Xanadu_(soundtrack)
                              57.34
  Time_(ELO_album)
                             45.26
                                                   0: jdbc:hive2://> SELECT request, lp.percentage
3 rows selected (46.852 seconds)
                                                            . . . . > FROM click_stream
                                                                  . > JOIN link_percents AS lp
                                                                        ON request = lp.page_title
                                                                  . > WHERE prev = 'Four_Light_Years'
                                                                . . > ORDER BY lp.percentage DESC
                                                                  . > LIMIT 20;
```

Step 8: Four_Light_Years

```
Stage-Stage-1: Map: 7 Reduce: 6 Cumulative CPU: 78.5 sec
Stage-Stage-2: Map: 1 Reduce: 1 Cumulative CPU: 2.39 sec
                                                             HDFS Read: 1491015499 HDFS Write: 6230 SUCCESS
                                                             HDFS Read: 15147 HDFS Write: 772 SUCCESS
Total MapReduce CPU Time Spent: 1 minutes 20 seconds 890 msec
OK
                                            | lp.percentage
                   request
                                              146.68
  Electric_Light_Orchestra_discography
                                              144.61
  Elo
  The_Flaming_Lips
                                             108.35
  Led_Zeppelin
                                              104.30
  Emerson,_Lake_&_Palmer
                                              103.93
  The Beatles
                                             101.66
  Fleetwood_Mac
                                             98.28
  The_Moody_Blues
                                             97.88
  The_Pussycat_Dolls
                                             96.94
  Queen_(band)
                                             95.19
  Take_That
                                             89.16
  Supertramp
                                             88.70
  Super_Furry_Animals
                                              78.02
  ELO_Part_II
                                             77.29
                                                          0: jdbc:hive2://> SELECT request, lp.percentage
  Daft_Punk
                                             72.24
  The_Move
                                             71.27
                                                                        . . . > FROM click_stream
  Bob_Marley
                                             70.90
                                                                                > JOIN link_percents AS lp
  List_of_Electric_Light_Orchestra_members
                                             69.23
                                                                                      ON request = lp.page_title
  Wizzard
                                             63.70
  Traveling_Wilburys
                                             60.86
                                                                                > WHERE prev = 'Electric_Light_Orchestra'
                                                                                > ORDER BY lp.percentage DESC
20 rows selected (47.42 seconds)
                                                             . . . . . . > LIMIT 20;
```

Step 9: Electric_Light_Orchestra



Question 4:

Find an example of an English wikipedia article that is relatively more popular in the UK. Find the same for the US and Australia.



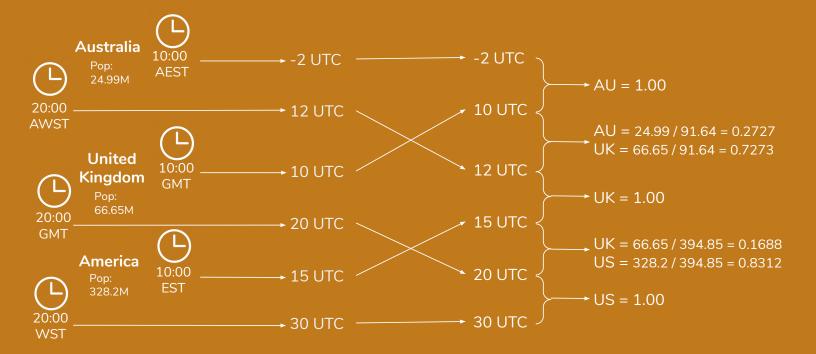
Methodology

- 1. Determine appropriate internet activity times for each country.
- 2. Translate those times into UTC.
- 3. Determine how to split traffic in overlapping time spans.
- 4. Create temporary tables for each country to hold data for given time spans. Include traffic split weights.
- 5. Multiply logged pageviews by weighted fractions and compare.



Assumptions

- People are most likely not using Wikipedia first thing in the morning or last thing at night \rightarrow 10:00 AM 8:00 PM (10:00 20:00).
- In time periods where there is an overlap between the countries: split traffic based on ratio of populations.
- For the US and Australia (which span multiple time zones) "start" traffic at 10:00 AM in the earliest time zone and end it at 20:00 (8:00 PM) in the latest time zone.



Time zone conversion into timeline of 10/20/2020 in UTC.

```
0: jdbc:hive2://> SELECT *
. . . . . . . > FROM comparison
. . . . . . . > WHERE uk_views > us_views
. . . . . . . > AND uk_views > au_views
. . . . . . . > ORDER BY uk_views DESC
. . . . . . . > LIMIT 20;
```

comparison.page_title	comparison.us_views	comparison.uk_views	comparison.au_views
F5 Networks	+ 19196	+ 43185	+ 9930
Big Muskie	10629	20155	18711
List_of_countries_by_GDP_(nominal)	1 10588	15827	11298
Daniel Sams (cricketer)	11364	15614	96
Centenarian	9739	15442	8153
Frankenstein_Castle	1696	8899	5240
Firass_Dirani	2265	8796	3607
Law_&_Order:_Special_Victims_Unit/Season_20	0	6890	2183
American_comic_book	1081	5489	2821
Aaron_Swartz	3471	5351	1927
Rampage_(2018_film)	3143	5320	3788
Michael_Anton	3216	4739	810
Blue_Zone	2754	4035	1725
Postcolonialism	745	4027	1909
Michael_Hastings_(journalist)	2798	3740	221
The_Girl_Next_Door_(2004_film)	1944	3441	1796
Kristian_Opseth	1316	3241	882
Paperback_Hero_(1999_film)	410	2854	1462
cutie_pie	1188	2846	376
Zangilan_District	2385	2437	520

First Results: More popular in the UK

```
0: jdbc:hive2://> SELECT *
. . . . . . . . > FROM comparison
. . . . . . . . > WHERE us_views > uk_views
. . . . . . . . > AND us_views > au_views
. . . . . . . . > ORDER BY us_views DESC
. . . . . . . . > LIMIT 20;
```

comparison.page_title	comparison.us views	comparison.uk_views	comparison.au views
	+	+	÷
Main_Page	3798632	1364056	2824281
Special:Search	978073	370043	709756
	345875	131167	252612
Sokushinbutsu	299177	481	465
CRajagopalachari	182501	35524	406
The_Haunting_of_Bly_Manor	127259	29919	110074
Mookie_Betts	112607	2078	7416
Three_Red_Banners	108174	2581	152
Chicago_Seven	100049	22759	95529
Bible	98711	33952	74129
Alexandria_Ocasio-Cortez	83299	4344	15339
The_Trial_of_the_Chicago_7	77997	19489	68396
Deaths_in_2020	76690	24740	52651
Abbie_Hoffman	74363	14622	73072
Harshad_Mehta	71122	29513	45138
2016_United_States_presidential_election	66849	15803	47749
Hunter_Biden	64820	15669	52276
Joe_Biden	63821	16946	50360
End_SARS	63655	6691	11496
Tyler_Glasnow	63459	l 758	1975

Second Results: More popular in the US

```
0: jdbc:hive2://> SELECT *
. . . . . . . . > FROM comparison
. . . . . . . . > WHERE au_views > uk_views
. . . . . . . . > AND au_views > us_views
. . . . . . . . > ORDER BY au_views DESC
. . . . . . . . > LIMIT 20;
```

comparison.page_title	comparison.us_views	comparison.uk_views	comparison.au_views
	168187	57121	193636
Kyler_Murray	13551	7685	97635
Robert_Redford	70816	41428	97483
Sisters_at_Heart	3690	4725	97258
Jeff_Bridges	59613	35354	84707
Dancing_with_the_Stars_(American_season_29)	20922	8159	79787
Murder_of_Robert_McCartney	2476	24092	78257
Killing_in_the_Name	914	1064	51174
Microsoft_Office	47060	19352	49238
SSC_Tuatara	39627	17659	47022
Andy_Dalton	6318	3007	47019
Lovecraft_Country_(TV_series)	39734	8472	40819
Anthony_Fauci	26076	10437	40639
Josh_Allen_(quarterback)	3655	1573	34549
Patrick_Mahomes	8180	2857	34108
Watts_family_murders	32782	9283	32817
Lola_Van_Wagenen	25165	14788	31893
Chrishell_Stause	11890	2522	31754
Kirstie_Alley	11169	5777	31050
Budda_Baker	6633	2626	30667

Third Results: More popular in Australia

Question 5:

How many users will see the average vandalized wikipedia page before the offending edit is reversed?



1.



Question 6:

Run an analysis you find interesting on the wikipedia datasets we're using.

My Selection:

Which of my favorite 10 animes has the highest view total?



Similar to question one, I'll check and compare the total pageviews of 10 of my favorite anime shows, which are:

- 1. Attack on Titan
- 2. Baccano!
- 3. Cowboy Bebop
- 4. Crayon Shin-chan
- 5. Death Note

- 6. Eden of the East
- 7. FLCL
- 8. Ghost in the Shell
- 9. Mushishi
- 10. Spice and Wolf

```
0: jdbc:hive2://> SELECT *
......> FROM total_views
.....> WHERE page_title = 'Attack_on_Titan'
....> OR page_title = 'Baccano!'
....> OR page_title = 'Cowboy_Bebop'
....> OR page_title = 'Crayon_Shin-chan'
....> OR page_title = 'Death_Note'
....> OR page_title = 'Eden_of_the_East'
....> OR page_title = 'FLCL'
....> OR page_title = 'Ghost_in_the_Shell'
....> OR page_title = 'Mushishi'
....> OR page_title = 'Spice_and_Wolf'
....> ORDER BY total_views DESC;
```

total_views.page_title	total_views.total_views
Attack_on_Titan	12439
Death_Note	7095
Cowboy_Bebop	4706
Ghost_in_the_Shell	2781
Crayon_Shin-chan	2553
FLCL	1856
Spice_and_Wolf	753
Baccano!	684
Mushishi	680
Eden_of_the_East	439

Results



https://github.com/sean-horner/revature_project_1.git