

# Project 1:

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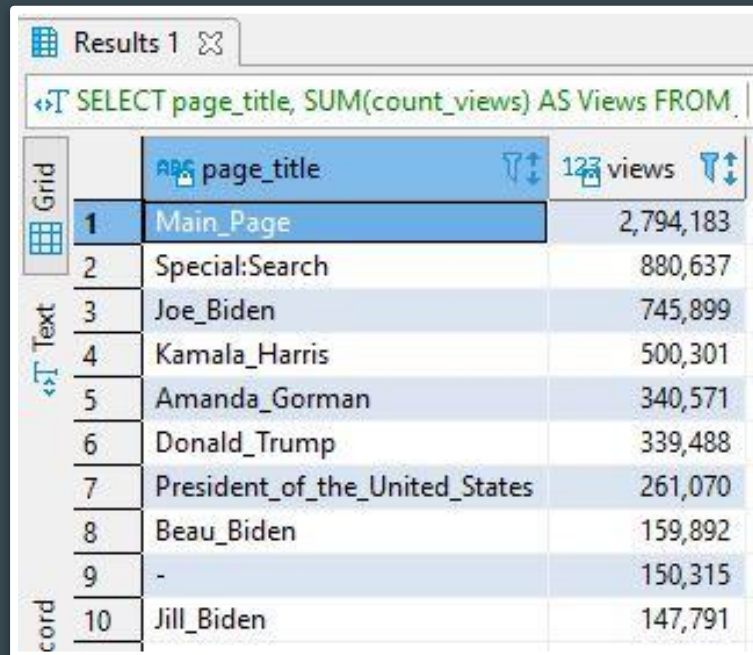
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# Questions 1:

Which English wikipedia article got the most traffic on January 20, 2021?

What we needed to solve this:

- All pageviews data from January 20th, 2021.
- Filtering the domain code to English articles only.
- Query for the total Sum of the all the views for each individual page.
  - Grouping by Page Title in order to avoid duplicates.
- Lastly, summing all the page views associated with each page title.



The screenshot shows a database query results window titled "Results 1". The query is: `SELECT page_title, SUM(count_views) AS Views FROM`. The results are displayed in a table with two columns: "page\_title" and "Views". The table has 10 rows, with the first row highlighted in blue. The first row shows "Main\_Page" with 2,794,183 views. The other rows show various other page titles and their view counts.

|    | page_title                     | Views     |
|----|--------------------------------|-----------|
| 1  | Main_Page                      | 2,794,183 |
| 2  | Special:Search                 | 880,637   |
| 3  | Joe_Biden                      | 745,899   |
| 4  | Kamala_Harris                  | 500,301   |
| 5  | Amanda_Gorman                  | 340,571   |
| 6  | Donald_Trump                   | 339,488   |
| 7  | President_of_the_United_States | 261,070   |
| 8  | Beau_Biden                     | 159,892   |
| 9  | -                              | 150,315   |
| 10 | Jill_Biden                     | 147,791   |

# Questions 2:

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

What we needed to solve this:

- December clickstream data filtered to only show internal links.
- December page views data
  - First assumption, since all December page views data cannot be downloaded.
- Percentage of internal clicks for a page over the amount of traffic that page got.

Results 1

SQL: `SELECT * FROM finalFraction`

|   | ABC prev   | 123 sumclickstream | 123 combined_count_views | 123 percentage |
|---|--|--------------------|--------------------------|----------------|
| 1 | Seth Costello  | 20,953             | 31                       | 675.9          |
| 2 | Hawkeye (2021 TV series)                             | 58,253             | 93                       | 626.38         |
| 3 | The Battle of Bhima Koregaon (film)                  | 15,502             | 31                       | 500.06         |
| 4 | Babs (2017 film)                                     | 43,168             | 93                       | 464.17         |
| 5 | Index of BDSM articles                               | 40,673             | 93                       | 437.34         |
| 6 | Evermore   | 13,226             | 31                       | 426.65         |
| 7 | Shobha Ram Kumawat                                   | 12,985             | 31                       | 418.87         |
| 8 | List of people known for extensive body modification | 12,934             | 31                       | 417.23         |

Results 1

SQL: `SELECT * FROM finalFraction`

|   | ABC prev                              | 123 sumclickstream | 123 combined_count_views | 123 percentage |
|---|---------------------------------------|--------------------|--------------------------|----------------|
| 1 | Elizabeth II                          | 3,850,856          | 513,050                  | 7.51           |
| 2 | George V                              | 787,806            | 105,586                  | 7.46           |
| 3 | Queen Victoria                        | 889,418            | 130,665                  | 6.81           |
| 4 | Schitt's Creek                        | 873,286            | 133,486                  | 6.54           |
| 5 | George VI                             | 1,355,087          | 226,176                  | 5.99           |
| 6 | Queen Elizabeth The Queen Mother      | 582,878            | 101,029                  | 5.77           |
| 7 | Charles, Prince of Wales              | 1,699,313          | 317,905                  | 5.35           |
| 8 | National Lampoon's Christmas Vacation | 687,327            | 129,704                  | 5.3            |

# Questions 3:

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

What we needed to solve this:

- Using the same clickstream data as question two, and filtering it to start with Hotel California.
- December page views assumption data.
- Percentage of internal links starting with Hotel California
  - Then following that top chain to it's next highest top chain.

Hotel California (disambiguation) -> Filter\_bubble (“Hotel California effect, related to media filter bubbles”) -> Eli Pariser

Results 1

SELECT \* FROM finalFractionHC

|   | abc_prev                          | abc_curr                          | 123 sumclickstream | 123 total_pageviews | 123 percentage |
|---|-----------------------------------|-----------------------------------|--------------------|---------------------|----------------|
| 1 | Hotel_California_(disambiguation) | Filter_bubble                     | 35                 | 31                  | 1.13           |
| 2 | Hotel_California_(2008_film)      | Tatyana_Ali                       | 34                 | 31                  | 1.1            |
| 3 | Hotel_California_(disambiguation) | Hotel_California_(Eagles_album)   | 33                 | 31                  | 1.06           |
| 4 | Hotel_California_(Tyga_album)     | Fan_of_a_Fan:_The_Album           | 251                | 248                 | 1.01           |
| 5 | Hotel_California_(2008_film)      | Erik_Palladino                    | 30                 | 31                  | 0.97           |
| 6 | Hotel_California_(disambiguation) | Todor_Santos,_Baja_California_Sur | 30                 | 31                  | 0.97           |
| 7 | Hotel_California_(disambiguation) | Hotel_California_(2008_film)      | 27                 | 31                  | 0.87           |
| 8 | Hotel_California_2020_Tour        | Glenn_Frey                        | 94                 | 186                 | 0.51           |

Results 1

SELECT \* FROM finalseries

|   | abc_first_article                 | abc_second_article | abc_curr                   | 123 total_percent |
|---|-----------------------------------|--------------------|----------------------------|-------------------|
| 1 | Hotel_California_(disambiguation) | Filter_bubble      | Eli_Pariser                | 0.07              |
| 2 | Hotel_California_(disambiguation) | Filter_bubble      | Echo_chamber_(media)       | 0.05              |
| 3 | Hotel_California_(disambiguation) | Filter_bubble      | Social_media_stock_bubble  | 0.01              |
| 4 | Hotel_California_(disambiguation) | Filter_bubble      | Personalized_search        | 0.01              |
| 5 | Hotel_California_(disambiguation) | Filter_bubble      | Google_Personalized_Search | 0.01              |
| 6 | Hotel_California_(disambiguation) | Filter_bubble      | Allegory_of_the_cave       | 0.01              |
| 7 | Hotel_California_(disambiguation) | Filter_bubble      | News_Feed                  | 0.01              |
| 8 | Hotel_California_(disambiguation) | Filter_bubble      | Selective_exposure_theory  | 0                 |

# Questions 4:

Find an example of an English wikipedia article that is relatively more popular in the Americas than elsewhere.

What we needed to solve this:

- Data from page views during popular hours in the Americas (7pm - 11pm EST or 14:00 - 18:00 UTC)
- Data from page views during resting hours in the Americas (1am-5am EST or 20:00 - 1:00 UTC)
- The difference between pageviews of awake hours versus pageviews of hours asleep.



| Results 1                   |                    |                 |                  |            |
|-----------------------------|--------------------|-----------------|------------------|------------|
| SELECT * FROM combinedHours |                    |                 |                  |            |
|                             | page_title_am      | pageviews_awake | pageviews_asleep | popularity |
| 1                           | Main_Page          | 1,120,431       | 897,343          | 223,088    |
| 2                           | -                  | 62,477          | 50,940           | 11,537     |
| 3                           | Nyan_Cat           | 16,681          | 5,571            | 11,110     |
| 4                           | YouTube            | 19,414          | 10,745           | 8,669      |
| 5                           | Tea_with_Mussolini | 9,627           | 1,394            | 8,233      |
| 6                           | CEO                | 15,746          | 8,313            | 7,433      |
| 7                           | YouTube_Music      | 14,621          | 7,716            | 6,905      |

# Questions 5:

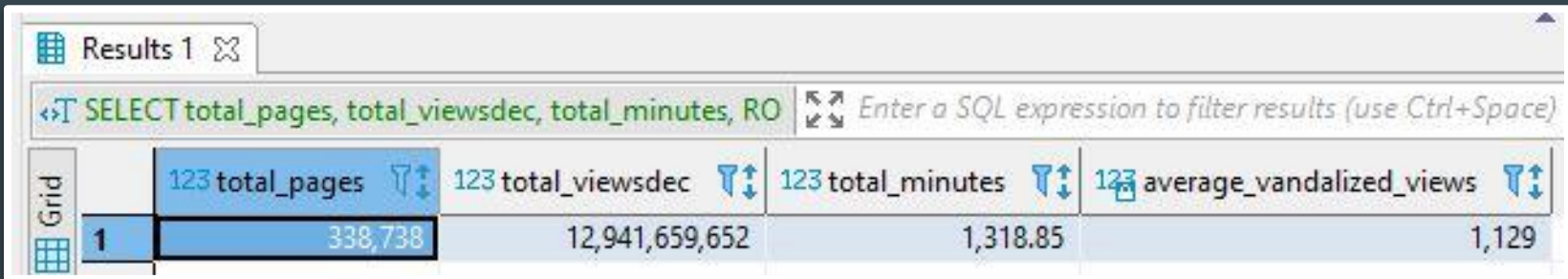
Analyze how many users will see the average vandalized wikipedia page before the offending edit is reversed.

What we needed to solve this:

- Average minutes a vandalized webpage stays up in the month of December.
- Pageviews in December
- Total pages visited in December

The data I used to answer this question:

- Event\_entity = revision
- Event\_type = create
- Event\_timestamp
- Revision\_is\_identity\_reverted = true
- Revision\_seconds\_to\_identify\_revert



The screenshot shows a data visualization tool interface. At the top, there's a tab labeled 'Results 1'. Below it, a SQL query is entered: `SELECT total_pages, total_viewsdec, total_minutes, RO`. To the right of the query, there's a placeholder text: 'Enter a SQL expression to filter results (use Ctrl+Space)'. Below the query, a table of results is displayed. The table has four columns: 'total\_pages', 'total\_viewsdec', 'total\_minutes', and 'average\_vandalized\_views'. The first row of data shows values: 338,738, 12,941,659,652, 1,318.85, and 1,129. The table is styled with a light blue header and a light blue body. The first column is labeled 'Grid' and contains the number '1'.

|   | 123 total_pages | 123 total_viewsdec | 123 total_minutes | 123 average_vandalized_views |
|---|-----------------|--------------------|-------------------|------------------------------|
| 1 | 338,738         | 12,941,659,652     | 1,318.85          | 1,129                        |

# Questions 6:

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

I wanted to know how many unique users deleted a page on Wikipedia, and how many times did they do?

1086 row(s) fetched

| Results 1                  |               |               |
|----------------------------|---------------|---------------|
| SELECT * FROM deleteunique |               |               |
|                            | event_user_id | times_deleted |
| 1                          | 6,468         | 2             |
| 2                          | 12,978        | 1             |
| 3                          | 15,708        | 7             |
| 4                          | 42,168        | 1             |
| 5                          | 42,630        | 9             |
| 6                          | 68,432        | 1             |
| 7                          | 73,920        | 4             |
| 8                          | 82,432        | 367           |
| 9                          | 114,828       | 826           |
| 10                         | 130,326       | 10            |
| 11                         | 290,472       | 5             |
| 12                         | 445,466       | 1             |

| Results 1  |               |                      |
|--|---------------|----------------------|
| SELECT event_user_id, page_title FROM rawhistorydata |               |                      |
|  | event_user_id | page_title           |
| 1  | 290,472       | Republican_Ideals    |
| 2  | 290,472       | The_pup              |
| 3  | 290,472       | Sample_page/86120965 |
| 4  | 290,472       | Imposterfish/sandbox |
| 5  | 290,472       | Kayleigh_Sheehan     |

# Git Repo:

[https://github.com/delaney-lekien/Project1\\_DL](https://github.com/delaney-lekien/Project1_DL)