

MongoDB Queries & Output

[1] Query to find users(top 20) with most number of tweets

```
db.user_tweets.aggregate([
  {$unwind: "$tweets"},
  {$group: { _id: "$Username", tweet_count: {$sum: 1}}},
  {$sort: { tweet_count: -1}},
  {$project: { Username: "$_id", tweet_count: 1, _id: 0}},
  {$limit: 20}
])
```

```
[
  { tweet_count: 60, Username: 'translation_ja' },
  { tweet_count: 47, Username: 'SaveToNotion' },
  { tweet_count: 44, Username: 'trandanhmmo' },
  { tweet_count: 43, Username: 'richardkimphd' },
  { tweet_count: 38, Username: 'VeilleCyber3' },
  { tweet_count: 33, Username: 'ChatGPTSpecial' },
  { tweet_count: 33, Username: 'mitstek' },
  { tweet_count: 31, Username: 'jimkaskade' },
  { tweet_count: 31, Username: 'infoitscienza' },
  { tweet_count: 30, Username: 'ArtilNews' },
  { tweet_count: 30, Username: 'AaronMarcelineo' },
  { tweet_count: 27, Username: 'RubenKarvalho' },
  { tweet_count: 27, Username: 'itsrohitchouhan' },
  { tweet_count: 27, Username: 'bar_zie' },
  { tweet_count: 26, Username: 'ArtIntel_b' },
  { tweet_count: 26, Username: 'genericgranola' },
  { tweet_count: 26, Username: 'halfeatenmind' },
  { tweet_count: 25, Username: 'MidJourneyAI_' },
  { tweet_count: 25, Username: 'yosiokamamoru' },
  { tweet_count: 25, Username: 'Alan_Nishihara' }
]
```

```

Atlas atlas-5iib46-shard-0 [primary] chatgpt>
Atlas atlas-5iib46-shard-0 [primary] chatgpt> db.user_tweets.aggregate([ { $unwind: "$tweets" }, { $group: { _id: "$Username", tweet_count: { $sum: 1 } } }, { $sort: { tweet_count: -1 } }, { $project: { Username: "$_id", tweet_count: 1, _id: 0 } }, { $limit: 20 } ])
[
  { tweet_count: 60, Username: 'translation_ja' },
  { tweet_count: 47, Username: 'SaveToNotion' },
  { tweet_count: 44, Username: 'trandanhmmo' },
  { tweet_count: 43, Username: 'richardkimphd' },
  { tweet_count: 38, Username: 'VeilleCyber3' },
  { tweet_count: 33, Username: 'mitstek' },
  { tweet_count: 33, Username: 'ChatGPTSpecial' },
  { tweet_count: 31, Username: 'infoitscienza' },
  { tweet_count: 31, Username: 'jimkaskade' },
  { tweet_count: 30, Username: 'ArtilNews' },
  { tweet_count: 30, Username: 'AaronMarcelineo' },
  { tweet_count: 27, Username: 'bar_zie' },
  { tweet_count: 27, Username: 'RubenKarvalho' },
  { tweet_count: 27, Username: 'itsrohitchouhan' },
  { tweet_count: 26, Username: 'halfateenmind' },
  { tweet_count: 26, Username: 'ArtIntel_b' },
  { tweet_count: 26, Username: 'genericgranola' },
  { tweet_count: 25, Username: 'Alan_Nishihara' },
  { tweet_count: 25, Username: 'MidJourneyAI_' },
  { tweet_count: 25, Username: 'yosiokamamoru' }
]

```

[2] Query to get most viral tweets (wrt likes, replies and retweets)

```

db.user_tweets.aggregate([
  { $unwind: "$tweets" },
  { $project: { _id: 0, tweet_id: "$tweets.tweet_id", Text: "$tweets.Text", Username: "$Username", TotalEngagement: { $sum: ["$tweets.RetweetCount", "$tweets.LikeCount", "$tweets.ReplyCount"] } } },
  { $sort: { TotalEngagement: -1 } }
])

```

```

[
  {
    tweet_id: Long("1617162355112124421"),
    Text: 'ChatGPT passed a Wharton MBA exam. \n\nTime to overhaul education.',
    Username: 'GRDecter',
    TotalEngagement: 64309
  },
  {
    tweet_id: Long("1617403120971309057"),
    Text: '子どもの練習用に基礎単語1000単語くらい網羅した瞬間英作文教材ほしいけど自作するのが大変そうだなーどうしようかなーって考えてたけど、ChatGPTさんが一瞬で作ってくれることに気付いた。ほんと凄いねこのAI...。https://t.co/ZEaf3WH5eQ',
    Username: 'sashishi_EN',
    TotalEngagement: 21151
  },
  {
    tweet_id: Long("1617330304322260993"),

```

Text: 'The fact that ChatGPT writes strange and mediocre undergraduate humanities papers but fantastic elite MBA exams suggests it may not have the same implications for every kind of education <https://t.co/6MiaepzCDU>',

Username: 'mccormick_ted',

TotalEngagement: 18798

},

{

tweet_id: Long("1617194845810077697"),

Text: 'Pretty absurd that chatGPT has passed the United States Medical Licensing Examination (USMLE).
\n' +

'\n' +

'Today, it takes 4 years of med school and 2+ years of clinical rotations to pass. It tests ambiguous scenarios & closely-related differential diagnoses\n' +

'\n' +

'<https://t.co/oGdKXhEnUt>',

Username: 'noor_siddiqui_',

TotalEngagement: 15680

},

{

tweet_id: Long("1617715712461766657"),

Text: 'ChatGPT has passed:\n' +

'\n' +

'- United States medical license exam\n' +

'\n' +

'- The Bar Exam\n' +

'\n' +

'- MBA operations exam \n' +

'\n' +

'Knowledge workers should be very worried',

Username: 'GRDecter',

TotalEngagement: 15017

},

{

tweet_id: Long("1617526645296082945"),

Text: 'JUST IN: ChatGPT creator OpenAI signs multi-year, multi-billion investment deal with Microsoft \$MSFT.',

Username: 'WatcherGuru',

TotalEngagement: 14213

},

{

tweet_id: Long("1617386607006584832"),

Text: 'ChatGPT, an artificial intelligence search tool, has passed the United States Medical Licensing Exam. <https://t.co/sK639Ih6PR>',

Username: 'WatcherGuru',

TotalEngagement: 13062

}, ...]

```
Atlas atlas-5iib46-shard-0 [primary] chatgpt> db.user_tweets.aggregate([ { $unwind: "$tweets" }, { $project: {
_id: 0, tweet_id: "$tweets.tweet_id", Text: "$tweets.Text", Username: "$Username", TotalEngagement: { $sum: [
"$tweets.RetweetCount", "$tweets.LikeCount", "$tweets.ReplyCount" ] } } }, { $sort: { TotalEngagement: -1 } }])

[
  {
    tweet_id: Long("1617162355112124421"),
    Text: 'ChatGPT passed a Wharton MBA exam. \n\nTime to overhaul education.',
    Username: 'GRDecter',
    TotalEngagement: 64309
  },
  {
    tweet_id: Long("1617403120971309057"),
    Text: '子どもの練習用に基礎単語1000単語くらい網羅した瞬間英作文教材ほしいけど自作するの大変そうだなーどう
しようかなーって考えてたけど、ChatGPTさんが一瞬で作ってくれることに気付いた。ほんと凄いなこのAI…。 https://t
.co/ZEaf3WH5eQ',
    Username: 'sashishi_EN',
    TotalEngagement: 21151
  },
  {
    tweet_id: Long("1617330304322260993"),
    Text: 'The fact that ChatGPT writes strange and mediocre undergraduate humanities papers but fantastic eli
te MBA exams suggests it may not have the same implications for every kind of education https://t.co/6MiaepzCD
U',
    Username: 'mccormick_ted',
    TotalEngagement: 18798
  },
  {
    tweet_id: Long("1617194845810077697"),
    Text: 'Pretty absurd that chatGPT has passed the United States Medical Licensing Examination (USMLE). \n'
+
    '\n' +
    'Today, it takes 4 years of med school and 2+ years of clinical rotations to pass. It tests ambiguous sc
enarios & closely-related differential diagnoses\n' +
    '\n' +
    'https://t.co/oGdKXhEnUt',
    Username: 'noor_siddiqui_',
    TotalEngagement: 15680
  },
]
```

[3] Query to fetch top 20 most used hashtags in the tweets

```
db.user_tweets.aggregate([
  { $unwind: "$tweets" },
  { $match: { "tweets.hashtagCount": { $gt: 0 } } },
  { $project: { hashtags: "$tweets.hashtags" } },
  { $unwind: "$hashtags" },
  { $group: { _id: "$hashtags", count: { $sum: 1 } } },
  { $sort: { count: -1 } },
  { $limit: 20 }
])

[
  { _id: '#chatgpt', count: 9462 },
  { _id: '#ai', count: 2543 },
  { _id: '#openai', count: 1013 },
  { _id: '#artificialintelligence', count: 723 },
  { _id: '#microsoft', count: 507 },
```

```

{ _id: '#chatgpt', count: 311 },
{ _id: '#technology', count: 303 },
{ _id: '#ia', count: 283 },
{ _id: '#google', count: 277 },
{ _id: '#machinelearning', count: 258 },
{ _id: '#chatgpt.', count: 237 },
{ _id: '#tech', count: 237 },
{ _id: '#chatgpt3', count: 205 },
{ _id: '#cybersecurity', count: 149 },
{ _id: '#chatbot', count: 148 },
{ _id: '#openaichatgpt', count: 136 },
{ _id: '#crypto', count: 135 },
{ _id: '#gpt3', count: 131 },
{ _id: '#education', count: 125 },
{ _id: '#deeplearning', count: 122 }
]

```

```

Atlas atlas-5iib46-shard-0 [primary] chatgpt> db.user_tweets.aggregate([ { $unwind: "$tweets" }, { $match: {
"tweets.hashtagCount": { $gt: 0 } } }, { $project: { hashtags: "$tweets.hashtags" } }, { $unwind: "$hashtags"
}, { $group: { _id: "$hashtags", count: { $sum: 1 } } }, { $sort: { count: -1 } }, { $limit: 20 }])
[
  { _id: '#chatgpt', count: 9462 },
  { _id: '#ai', count: 2543 },
  { _id: '#openai', count: 1013 },
  { _id: '#artificialintelligence', count: 723 },
  { _id: '#microsoft', count: 507 },
  { _id: '#chatgpt', count: 311 },
  { _id: '#technology', count: 303 },
  { _id: '#ia', count: 283 },
  { _id: '#google', count: 277 },
  { _id: '#machinelearning', count: 258 },
  { _id: '#tech', count: 237 },
  { _id: '#chatgpt.', count: 237 },
  { _id: '#chatgpt3', count: 205 },
  { _id: '#cybersecurity', count: 149 },
  { _id: '#chatbot', count: 148 },
  { _id: '#openaichatgpt', count: 136 },
  { _id: '#crypto', count: 135 },
  { _id: '#gpt3', count: 131 },
  { _id: '#education', count: 125 },
  { _id: '#deeplearning', count: 122 }
]

```

[4] Query to find tweets that have at least 50 retweets and have at least one user mentioned

```

db.user_tweets.find(
{"tweets.RetweetCount": {"$gt": 50}, "tweets.MentionedUsers": {"$ne": [ ]}},
{"Username": 1, _id: 0, "tweets.tweet_id": 1, "tweets.RetweetCount": 1, "tweets.MentionedUsers":
1}).sort({ "tweets.RetweetCount" : -1 }
)

[
{
  Username: 'Techie_kidsNFTs',

```

```
tweets: [
  {
    tweet_id: Long("1617403892152819713"),
    RetweetCount: 170,
    MentionedUsers: [ 'hey_wallet' ]
  }
],
{
  Username: 'RidT',
  tweets: [
    {
      tweet_id: Long("1617349810910265344"),
      RetweetCount: 118,
      MentionedUsers: [ 'juanandres_gs', 'alperovitch' ]
    }
  ]
},
{
  Username: 'kelseyhightower',
  tweets: [
    {
      tweet_id: Long("1617283297394200576"),
      RetweetCount: 92,
      MentionedUsers: [ 'Grady_Booch' ]
    }
  ]
},
{
  Username: 'IanColdwater',
  tweets: [
    {
      tweet_id: Long("1617516164019638274"),
      RetweetCount: 78,
      MentionedUsers: [ 'evacide', 'matthew_d_green' ]
    }
  ]
},
{
  Username: 'an_annago',
  tweets: [
    {
      tweet_id: Long("1617189510034657281"),
      RetweetCount: 68,
```

```

    MentionedUsers: [ 'HerftEducator', 'alexandre_gagne', 'Jan_Guenther_' ]
  }
]
},
{
  Username: 'alexjmingolla',
  tweets: [
    {
      tweet_id: Long("1617387046888435713"),
      RetweetCount: 59,
      MentionedUsers: [ 'WatcherGuru' ]
    }
  ]
}, ... ]

```

```

Atlas atlas-5iib46-shard-0 [primary] chatgpt> db.user_tweets.find({"tweets.RetweetCount": {"$gt": 50}, "tweets.MentionedUsers": {"$ne": []}}, {"Username": 1, _id: 0, "tweets.tweet_id": 1, "tweets.RetweetCount": 1, "tweets.MentionedUsers": 1}).sort({"tweets.RetweetCount" : -1})
[
  {
    Username: 'Techie_kidsNFTs',
    tweets: [
      {
        tweet_id: Long("1617403892152819713"),
        RetweetCount: 170,
        MentionedUsers: [ 'hey_wallet' ]
      }
    ]
  },
  {
    Username: 'RidT',
    tweets: [
      {
        tweet_id: Long("1617349810910265344"),
        RetweetCount: 118,
        MentionedUsers: [ 'juanandres_gs', 'alperovitch' ]
      }
    ]
  },
  {
    Username: 'kelseyhightower',
    tweets: [
      {
        tweet_id: Long("1617283297394200576"),
        RetweetCount: 92,
        MentionedUsers: [ 'Grady_Booch' ]
      }
    ]
  },
  {
    Username: 'IanColdwater',
    tweets: [
      {
        tweet_id: Long("1617516164019638274"),
        RetweetCount: 78,

```

[5] Query to fetch top 20 platforms(android,iphone,etc) used for chatgpt discussions/tweets with #chatgpt

```

db.user_tweets.aggregate([
{$unwind: "$tweets"},

```

```

{$unwind: "$tweets.hashtags"},
{$match: {"tweets.hashtags": "#chatgpt"}},
{$group: {_id: "$tweets.Source", count: {$sum: 1}}},
{$sort: {count: -1}},
{$limit: 20},
{$project: {_id: 0, Source: "$_id", count: 1}}
])

```

```

[
  { count: 3909, Source: 'Twitter Web App' },
  { count: 1998, Source: 'Twitter for iPhone' },
  { count: 1737, Source: 'Twitter for Android' },
  { count: 181, Source: 'LinkedIn' },
  { count: 179, Source: 'Buffer' },
  { count: 172, Source: 'TweetDeck' },
  { count: 153, Source: 'Twitter for iPad' },
  { count: 131, Source: 'Hootsuite Inc.' },
  { count: 66, Source: 'trancefer' },
  { count: 64, Source: 'IFTTT' },
  { count: 51, Source: 'shem0304' },
  { count: 50, Source: 'Semrush Social Media Tool' },
  { count: 44, Source: 'Twitter for Mac' },
  { count: 31, Source: 'dlvr.it' },
  { count: 28, Source: 'Jetpack.com' },
  { count: 28, Source: 'Sprout Social' },
  { count: 26, Source: 'HubSpot' },
  { count: 24, Source: 'Artil AI' },
  { count: 23, Source: 'TweetDeck Web App' },
  { count: 22, Source: 'Blog2Social APP' }
]

```



```

Atlas atlas-5iib46-shard-0 [primary] chatgpt> db.user_tweets.aggregate([ { $unwind: "$tweets" }, { $unwind: "
$tweets.hashtags" }, { $match: { "tweets.hashtags": "#chatgpt" } }, { $group: { _id: "$tweets.Source", count:
{ $sum: 1 } } }, { $sort: { count: -1 } }, { $limit: 20 }, { $project: { _id: 0, Source: "$_id", count: 1 }
}])
[
  { count: 3909, Source: 'Twitter Web App' },
  { count: 1998, Source: 'Twitter for iPhone' },
  { count: 1737, Source: 'Twitter for Android' },
  { count: 181, Source: 'LinkedIn' },
  { count: 179, Source: 'Buffer' },
  { count: 172, Source: 'TweetDeck' },
  { count: 153, Source: 'Twitter for iPad' },
  { count: 131, Source: 'Hootsuite Inc.' },
  { count: 66, Source: 'trancefer' },
  { count: 64, Source: 'IFTTT' },
  { count: 51, Source: 'shem0304' },
  { count: 50, Source: 'Semrush Social Media Tool' },
  { count: 44, Source: 'Twitter for Mac' },
  { count: 31, Source: 'dlvr.it' },
  { count: 28, Source: 'Sprout Social' },
  { count: 28, Source: 'Jetpack.com' },
  { count: 26, Source: 'HubSpot' },
  { count: 24, Source: 'Artit AI' },
  { count: 23, Source: 'TweetDeck Web App' },
  { count: 22, Source: 'Blog2Social APP' }
]

```

[6] Query to find out number of tweets based on language used

```

db.user_tweets.aggregate([
  { $unwind: "$tweets" },
  { $group: { _id: "$tweets.Language", TweetCount: { $sum: 1 } } },
  { $project: { _id: 0, Language: "$_id", TweetCount: 1 } },
  { $sort: { TweetCount: -1 } }
])

```

```

[
  { TweetCount: 32076, Language: 'en' },
  { TweetCount: 5046, Language: 'ja' },
  { TweetCount: 3315, Language: 'es' },
  { TweetCount: 2492, Language: 'fr' },
  { TweetCount: 1207, Language: 'de' },
  { TweetCount: 1175, Language: 'pt' },
  { TweetCount: 443, Language: 'it' },
  { TweetCount: 436, Language: 'tr' },
  { TweetCount: 423, Language: 'und' },
  { TweetCount: 395, Language: 'qme' },
  { TweetCount: 392, Language: 'ar' },
  { TweetCount: 319, Language: 'nl' },
  { TweetCount: 251, Language: 'in' },
  { TweetCount: 193, Language: 'th' },
  { TweetCount: 187, Language: 'fa' },

```

```
{ TweetCount: 181, Language: 'ru' },
{ TweetCount: 149, Language: 'zh' },
{ TweetCount: 141, Language: 'ko' },
{ TweetCount: 113, Language: 'iw' },
{ TweetCount: 113, Language: 'ca' }
```

```
Atlas atlas-5iib46-shard-0 [primary] chatgpt> db.user_tweets.aggregate([
...   {$unwind: "$tweets"},
...   {$group: {_id: "$tweets.Language", TweetCount: {$sum: 1}}},
...   {$project: {_id: 0, Language: "$_id", TweetCount: 1}},
...   {$sort: {TweetCount: -1}}
... ])
[
  { TweetCount: 32076, Language: 'en' },
  { TweetCount: 5046, Language: 'ja' },
  { TweetCount: 3315, Language: 'es' },
  { TweetCount: 2492, Language: 'fr' },
  { TweetCount: 1207, Language: 'de' },
  { TweetCount: 1175, Language: 'pt' },
  { TweetCount: 443, Language: 'it' },
  { TweetCount: 436, Language: 'tr' },
  { TweetCount: 423, Language: 'und' },
  { TweetCount: 395, Language: 'qme' },
  { TweetCount: 392, Language: 'ar' },
  { TweetCount: 319, Language: 'nl' },
  { TweetCount: 251, Language: 'in' },
  { TweetCount: 193, Language: 'th' },
  { TweetCount: 187, Language: 'fa' },
  { TweetCount: 181, Language: 'ru' },
  { TweetCount: 149, Language: 'zh' },
  { TweetCount: 141, Language: 'ko' },
  { TweetCount: 113, Language: 'iw' },
  { TweetCount: 113, Language: 'ca' }
]
```

[7] Query to fetch top users with highest average like count

```
db.user_tweets.aggregate([
{"$unwind": "$tweets"},
{"$group": {"_id": "$Username", "avg_likes_per_tweet": {"$avg": "$tweets.LikeCount"}}},
{$sort: {avg_likes_per_tweet: -1}}
])
```

```
[
  { _id: 'GRDecter', avg_likes_per_tweet: 24061 },
```

```
{_id: 'WatcherGuru', avg_likes_per_tweet: 10836.5 },
{_id: 'Veskii_', avg_likes_per_tweet: 9125 },
{_id: 'mccormick_ted', avg_likes_per_tweet: 8468.5 },
{_id: 'sashishi_EN', avg_likes_per_tweet: 6230.666666666667 },
{_id: 'disclosetv', avg_likes_per_tweet: 5911 },
{_id: 'hasantoxr', avg_likes_per_tweet: 5682 },
{_id: 'VittoStack', avg_likes_per_tweet: 5513 },
{_id: 'ChristophMolnar', avg_likes_per_tweet: 4853 },
{_id: 'vmochama', avg_likes_per_tweet: 4643 },
{_id: 'APompliano', avg_likes_per_tweet: 4492 },
{_id: 'GrindMarket', avg_likes_per_tweet: 4413 },
{_id: 'stats_feed', avg_likes_per_tweet: 3915 },
{_id: 'FitFounder', avg_likes_per_tweet: 3732 },
{_id: 'Mike_Scully_', avg_likes_per_tweet: 3529 },
{_id: 'HeidyKhlaaf', avg_likes_per_tweet: 3507 },
{_id: 'noor_siddiqui_', avg_likes_per_tweet: 3323.5 },
{_id: 'vxunderground', avg_likes_per_tweet: 2770 },
{_id: 'patrickbetdavid', avg_likes_per_tweet: 2184 },
{_id: 'fireship_dev', avg_likes_per_tweet: 1935 }
```

]

Type "it" for more

```
Atlas atlas-5iib46-shard-0 [primary] chatgpt> db.user_tweets.aggregate([
...   {"$unwind": "$tweets"},
...   {"$group": {"_id": "$Username", "avg_likes_per_tweet": {"$avg": "$tweets.LikeCount"}}},
...   {"$sort": {"avg_likes_per_tweet": -1}}
... ])
[
  { _id: 'GRDecter', avg_likes_per_tweet: 24061 },
  { _id: 'WatcherGuru', avg_likes_per_tweet: 10836.5 },
  { _id: 'Veskii_', avg_likes_per_tweet: 9125 },
  { _id: 'mccormick_ted', avg_likes_per_tweet: 8468.5 },
  { _id: 'sashishi_EN', avg_likes_per_tweet: 6230.666666666667 },
  { _id: 'disclosetv', avg_likes_per_tweet: 5911 },
  { _id: 'hasantoxr', avg_likes_per_tweet: 5682 },
  { _id: 'VittoStack', avg_likes_per_tweet: 5513 },
  { _id: 'ChristophMolnar', avg_likes_per_tweet: 4853 },
  { _id: 'vmochama', avg_likes_per_tweet: 4643 },
  { _id: 'APompliano', avg_likes_per_tweet: 4492 },
  { _id: 'GrindMarket', avg_likes_per_tweet: 4413 },
  { _id: 'stats_feed', avg_likes_per_tweet: 3915 },
  { _id: 'FitFounder', avg_likes_per_tweet: 3732 },
  { _id: 'Mike_Scully_', avg_likes_per_tweet: 3529 },
  { _id: 'HeidyKhlaaf', avg_likes_per_tweet: 3507 },
  { _id: 'noor_siddiqui_', avg_likes_per_tweet: 3323.5 },
  { _id: 'vxunderground', avg_likes_per_tweet: 2770 },
  { _id: 'patrickbetdavid', avg_likes_per_tweet: 2184 },
  { _id: 'fireship_dev', avg_likes_per_tweet: 1935 }
]
```

[8] Query to check most popular web links(Outlinks) posted in the tweet based on count of occurrence

```

db.user_tweets.aggregate([
  {$unwind: "$tweets"},
  {$unwind: "$tweets.Outlinks"},
  {$group: {_id: "$tweets.Outlinks", "count": {$sum: 1}}},
  {$project: {Outlink: "$_id", count: 1, _id: 0}},
  {$sort: {count: -1}},
  {$limit: 10}
])

```

```

[
  {
    count: 156,
    Outlink: 'https://www.ft.com/content/7229ba86-142a-49f6-9821-f55c07536b7c'
  },
  {
    count: 142,
    Outlink: 'https://twitter.com/noor_siddiqui_/status/1617194845810077697'
  },
  {
    count: 112,
    Outlink: 'https://twitter.com/GRDecter/status/1617162355112124421'
  },
  {
    count: 98,
    Outlink: 'https://twitter.com/grdecter/status/1617162355112124421'
  },
  { count: 87, Outlink: 'http://twinybots.ch' },
  {
    count: 77,
    Outlink:
'https://fortune.com/2023/01/21/chatgpt-passed-wharton-mba-exam-one-professor-is-sounding-alarm-artifici
al-intelligence/'
  },
  {
    count: 75,
    Outlink: 'https://www.bloomberg.co.jp/news/articles/2023-01-23/ROXZ7KDWX2PT01'
  },
  {
    count: 71,
    Outlink: 'https://www.medrxiv.org/content/10.1101/2022.12.19.22283643v2'
  },
  {
    count: 69,
    Outlink: 'https://twitter.com/nabeelqu/status/1616845386903347200'
  }
]

```

```

},
{
  count: 68,
  Outlink:
'https://www.cnbc.com/2023/01/23/microsoft-announces-multibillion-dollar-investment-in-chatgpt-maker-ope
nai.html'
}
]

```

```

Atlas atlas-5iib46-shard-0 [primary] chatgpt> db.user_tweets.aggregate([
... {$unwind: "$tweets"},
... {$unwind: "$tweets.Outlinks"},
... {$group: {_id: "$tweets.Outlinks", "count": {$sum: 1}}},
... {$project: {Outlink: "$_id", count: 1, _id: 0}},
... {$sort: {count: -1}},
... {$limit: 10}
... ])
[
{
  count: 156,
  Outlink: 'https://www.ft.com/content/7229ba86-142a-49f6-9821-f55c07536b7c'
},
{
  count: 142,
  Outlink: 'https://twitter.com/noor_siddiqui_/status/1617194845810077697'
},
{
  count: 112,
  Outlink: 'https://twitter.com/GRDecter/status/1617162355112124421'
},
{
  count: 98,
  Outlink: 'https://twitter.com/grdecter/status/1617162355112124421'
},
{ count: 87, Outlink: 'http://twinybots.ch' },
{
  count: 77,
  Outlink: 'https://fortune.com/2023/01/21/chatgpt-passed-wharton-mba-exam-one-professor-is-sounding-alarm-artificial-intelligence/'
},
{
  count: 75,
  Outlink: 'https://www.bloomberg.co.jp/news/articles/2023-01-23/ROXZ7KDWX2PT01'
},
{
  count: 71,
  Outlink: 'https://www.medrxiv.org/content/10.1101/2022.12.19.22283643v2'
},

```

[9] Query to fetch all the tweets that contain a specific hashtag

```

db.user_tweets.aggregate([
{$unwind: "$tweets"},
{$match: {"tweets.hashtags": "#chatsonic"}},
{$project: {_id: 0, Username: 1, "tweets.Datetime": 1, "tweets.Text": 1, "tweets.hashtags": 1}}
])

```

```

[
{
  Username: 'PoliticsWatch14',
  tweets: {
    Datetime: ISODate("2023-01-22T15:52:09.000Z"),

```

Text: 'Colleges and Universities are now scrambling in panic by the introduction of ChatGPT & unsure how they respond to students using it to write their assignments as part of continuous assessment. An interesting conundrum #ArtificialIntelligence #chatgpt4 #ChatSonic',

hashtags: ['#artificialintelligence', '#chatgpt4', '#chatsonic']

}

},

{

Username: 'R_CodigoRojo',

tweets: {

Datetime: ISODate("2023-01-22T20:33:28.000Z"),

Text: '@elhackernet Hay otro mucho mejor que #ChatGPT se llama #chatsonic',

hashtags: ['#chatgpt', '#chatsonic']

}

},

{

Username: 'BizzBuzzNews',

tweets: {

Datetime: ISODate("2023-01-23T05:52:12.000Z"),

Text: 'DeepL, ChatSonic are some alternatives of ChatGPT that you can try #ChatGPT #ChatSonic

#DeepLWrite #GoogleAI #Replika #Socratic #Twain <https://t.co/NdbYuZIVAv>,

hashtags: [

'#chatgpt',

'#chatsonic',

'#deeplwrite',

'#googleai',

'#replika',

'#socratic',

'#twain'

]

}

},

{

Username: 'ngc_3370',

tweets: {

Datetime: ISODate("2023-01-23T06:24:13.000Z"),

Text: '#ChatGPT and other #Artificialintelligence tools lie about religious, ecological, political and economic issues by hammering home the ideals of the dominant Left-wing #Doxa. Avoid them by blocking access to your friends and family. @OpenAI #Chatsonic <https://t.co/EYWBx71AV7>,

hashtags: ['#chatgpt', '#artificialintelligence', '#doxa.', '#chatsonic']

}

},

{

Username: 'benjaminyeurch',

tweets: {

```

    Datetime: ISODate("2023-01-23T09:50:11.000Z"),
    Text: 'Comment #ChatSonic dépasse #ChatGPT ? https://t.co/OBEgamo55f via @arobasenet',
    hashtags: [ '#chatsonic', '#chatgpt' ]
  },
  {
    Username: 'TheNFAPost',
    tweets: {
      Datetime: ISODate("2023-01-23T13:58:47.000Z"),
      Text: 'Writesonic Launches Super-powerful ChatGPT ChatSonic\n' +
        'https://t.co/r8zG6OnLv9\n' +
        '@SamanyouGarg @Writesonic @ChatSonicAI\n' +
        '@Photosonic_AI @ycombinator @startupindia \n' +
        '@NASSCOMStartUps #writesonic #chatgpt #chatsonic #chatbot #entrepreneur #ai #innovation
#artificialintelligence https://t.co/pg7OsJVeAP',
      hashtags: [
        '#writesonic',
        '#chatgpt',
        '#chatsonic',
        '#chatbot',
        '#entrepreneur',
        '#ai',
        '#innovation',
        '#artificialintelligence'
      ]
    }
  }, ... ]

```

```

Atlas atlas-5iib46-shard-0 [primary] chatgpt> db.user_tweets.aggregate([
... {$unwind: "$tweets"},
... {$match: {"tweets.hashtags": "#chatsonic"}},
... {$project: {_id: 0, Username: 1, "tweets.Datetime": 1, "tweets.Text": 1, "tweets.hashtags": 1}}
... ])
[
  {
    Username: 'PoliticsWatch14',
    tweets: {
      Datetime: ISODate("2023-01-22T15:52:09.000Z"),
      Text: 'Colleges and Universities are now scrambling in panic by the introduction of ChatGPT & unsu
re how they respond to students using it to write their assignments as part of continuous assessment. An int
eresting conundrum #ArtificialIntelligence #chatgpt4 #ChatSonic',
      hashtags: [ '#artificialintelligence', '#chatgpt4', '#chatsonic' ]
    }
  },
  {
    Username: 'R_CodigoRojo',
    tweets: {
      Datetime: ISODate("2023-01-22T20:33:28.000Z"),
      Text: '@elhackernet Hay otro mucho mejor que #ChatGPT se llama #chatsonic',
      hashtags: [ '#chatgpt', '#chatsonic' ]
    }
  },
  {
    Username: 'BizzBuzzNews',
    tweets: {
      Datetime: ISODate("2023-01-23T05:52:12.000Z"),
      Text: 'DeepL, ChatSonic are some alternatives of ChatGPT that you can try #ChatGPT #ChatSonic #DeepLWr
ite #GoogleAI #Replika #Socratic #Twain https://t.co/NdbYuZlVAv',
      hashtags: [
        '#chatgpt',
        '#chatsonic',
        '#deeplwrite',
        '#googleai',
        '#replika',
        '#socratic',
        '#twain'
      ]
    }
  },
  {
    Username: 'ngc_3370',

```

[10] Query is for counting the number of likes that were associated with each hashtag in all the tweets

```

db.user_tweets.aggregate([
{$unwind: "$tweets"},
{$unwind: "$tweets.hashtags"},
{$group: {_id: "$tweets.hashtags", TotalLikes: {$sum: "$tweets.LikeCount"}}},
{$project: {_id: 0, hashtag: "$_id", TotalLikes: 1}},
{$sort: {TotalLikes: -1}}
])

```

```

[
  { TotalLikes: 36083, hashtag: '#chatgpt' },
  { TotalLikes: 6316, hashtag: '#ai' },
  { TotalLikes: 3337, hashtag: '#chatgpt.' },
  { TotalLikes: 3153, hashtag: '#microsoft' },
  { TotalLikes: 2613, hashtag: '#openai' },

```



```
{ TotalLikes: 1386, hashtag: '#ia' },
{ TotalLikes: 1304, hashtag: '#midjourney' },
{ TotalLikes: 1189, hashtag: '#吸血鬼すぐ死ぬ2' },
{ TotalLikes: 1183, hashtag: '#artificialintelligence' },
{ TotalLikes: 1104, hashtag: '#chatgpt,' },
{ TotalLikes: 932, hashtag: '#edtech' },
{ TotalLikes: 749, hashtag: '#edchat' },
{ TotalLikes: 715, hashtag: '#ditchbook' },
{ TotalLikes: 702, hashtag: '#stablediffusion' },
{ TotalLikes: 683, hashtag: '#machinelearning' },
{ TotalLikes: 642, hashtag: '#twlz' },
{ TotalLikes: 619, hashtag: '#educoach' },
{ TotalLikes: 616, hashtag: '#etcoaches' },
{ TotalLikes: 608, hashtag: '#googleedu' },
{ TotalLikes: 596, hashtag: '#celebrated' }
```

]

Type "it" for more

```
Atlas atlas-5iib46-shard-0 [primary] chatgpt> db.user_tweets.aggregate([{$unwind: "$tweets"},{$unwind: "$
tweets.hashtags"},{$group: {_id: "$tweets.hashtags",TotalLikes: {$sum: "$tweets.LikeCount"}}},{$project:{$
_id: 0,hashtag: "$_id",TotalLikes: 1}}, {$sort: {TotalLikes: -1}}])
[
  { TotalLikes: 36083, hashtag: '#chatgpt' },
  { TotalLikes: 6316, hashtag: '#ai' },
  { TotalLikes: 3337, hashtag: '#chatgpt.' },
  { TotalLikes: 3153, hashtag: '#microsoft' },
  { TotalLikes: 2613, hashtag: '#openai' },
  { TotalLikes: 1386, hashtag: '#ia' },
  { TotalLikes: 1304, hashtag: '#midjourney' },
  { TotalLikes: 1189, hashtag: '#吸血鬼すぐ死ぬ2' },
  { TotalLikes: 1183, hashtag: '#artificialintelligence' },
  { TotalLikes: 1104, hashtag: '#chatgpt,' },
  { TotalLikes: 932, hashtag: '#edtech' },
  { TotalLikes: 749, hashtag: '#edchat' },
  { TotalLikes: 715, hashtag: '#ditchbook' },
  { TotalLikes: 702, hashtag: '#stablediffusion' },
  { TotalLikes: 683, hashtag: '#machinelearning' },
  { TotalLikes: 642, hashtag: '#twlz' },
  { TotalLikes: 619, hashtag: '#educoach' },
  { TotalLikes: 616, hashtag: '#etcoaches' },
  { TotalLikes: 608, hashtag: '#googleedu' },
  { TotalLikes: 596, hashtag: '#celebrated' }
]
```

[11] Query to calculate day-wise count of tweets

```
db.user_tweets.aggregate([
  { $unwind: "$tweets" },
  { $group: { _id: { $dateToString: { format: "%Y-%m-%d", date: "$tweets.Datetime" } }, count: { $sum:
    1 } } },
  { $sort: { "_id": 1 } }
])
```

[

```
{_id: '2023-01-22', count: 10068 },
{_id: '2023-01-23', count: 31700 },
{_id: '2023-01-24', count: 8233 }
```

```
]
```

```
Atlas atlas-5iib46-shard-0 [primary] chatgpt> db.user_tweets.aggregate([
... { $unwind: "$tweets" },
... { $group: { _id: { $dateToString: { format: "%Y-%m-%d", date: "$tweets.Datetime" } } }, count: { $sum: 1 } } },
... { $sort: { "_id": 1 } }
... ])
[
{ _id: '2023-01-22', count: 10068 },
{ _id: '2023-01-23', count: 31700 },
{ _id: '2023-01-24', count: 8233 }
]
```

[12] Query to fetch users that are mentioned most in all the tweets

```
db.user_tweets.aggregate([
{$unwind: "$tweets"},
{$unwind: "$tweets.MentionedUsers"},
{$group: { _id: "$tweets.MentionedUsers", count: { $sum: 1 } }},
{$sort: {count: -1}}, {$limit: 20},
{$project: { _id: 0, Username: "$_id", count: 1 } }
])
```

```
[
```

```
{ count: 744, Username: 'OpenAI' },
{ count: 495, Username: 'GRDecter' },
{ count: 368, Username: 'elonmusk' },
{ count: 308, Username: 'YouTube' },
{ count: 196, Username: 'chatgpt_issac' },
{ count: 173, Username: 'Microsoft' },
{ count: 158, Username: 'noor_siddiqui_' },
{ count: 150, Username: 'ChatGPT' },
{ count: 141, Username: 'sama' },
{ count: 131, Username: 'sejournal' },
{ count: 120, Username: 'mattgsouthern' },
{ count: 118, Username: 'emollick' },
{ count: 106, Username: 'ShiLLin_ViLLian' },
{ count: 106, Username: 'WatcherGuru' },
{ count: 94, Username: 'Google' },
{ count: 88, Username: 'hrtgn' },
{ count: 84, Username: 'nabeelqu' },
{ count: 80, Username: 'business' },
{ count: 71, Username: 'SmokeAwayyy' },
{ count: 66, Username: 'SaveToNotion' }
```

```
]
```

```

Atlas atlas-5iib46-shard-0 [primary] chatgpt> db.user_tweets.aggregate([
... {$unwind: "$tweets"},
... {$unwind: "$tweets.MentionedUsers"},
... {$group: {_id: "$tweets.MentionedUsers", count: {$sum: 1}}},
... {$sort: {count: -1}}, {$limit: 20},
... {$project: {_id: 0, Username: "$_id", count: 1}}
... ])
[
  { count: 744, Username: 'OpenAI' },
  { count: 495, Username: 'GRDecter' },
  { count: 368, Username: 'elonmusk' },
  { count: 308, Username: 'YouTube' },
  { count: 196, Username: 'chatgpt_issac' },
  { count: 173, Username: 'Microsoft' },
  { count: 158, Username: 'noor_siddiqui_' },
  { count: 150, Username: 'ChatGPT' },
  { count: 141, Username: 'sama' },
  { count: 131, Username: 'sejournal' },
  { count: 120, Username: 'mattgsouthern' },
  { count: 118, Username: 'emollick' },
  { count: 106, Username: 'ShiLLin_ViLLian' },
  { count: 106, Username: 'WatcherGuru' },
  { count: 94, Username: 'Google' },
  { count: 88, Username: 'hrtgn' },
  { count: 84, Username: 'nabeelqu' },
  { count: 80, Username: 'business' },
  { count: 71, Username: 'SmokeAwayyy' },
  { count: 66, Username: 'SaveToNotion' }
]

```