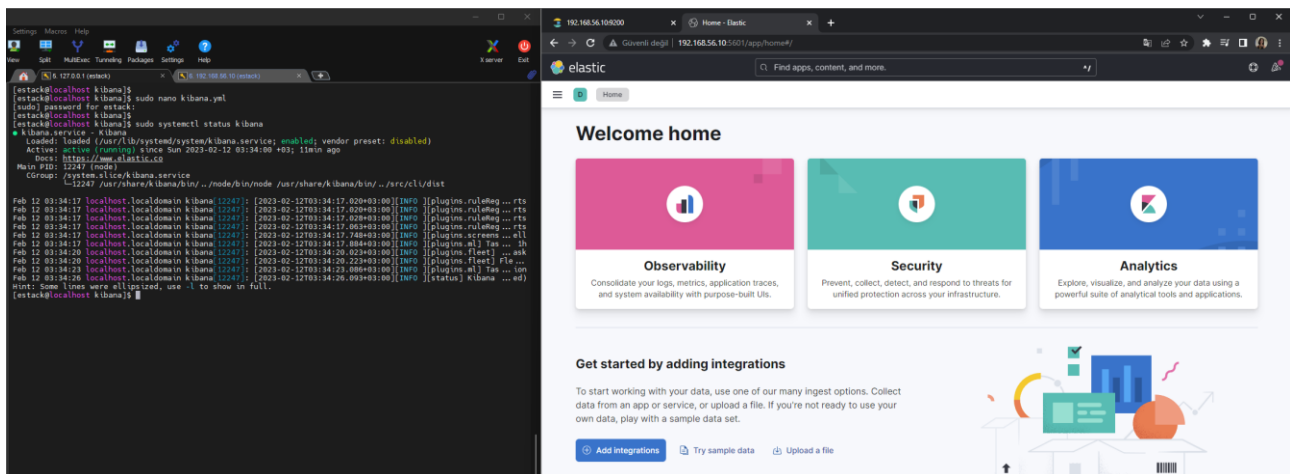
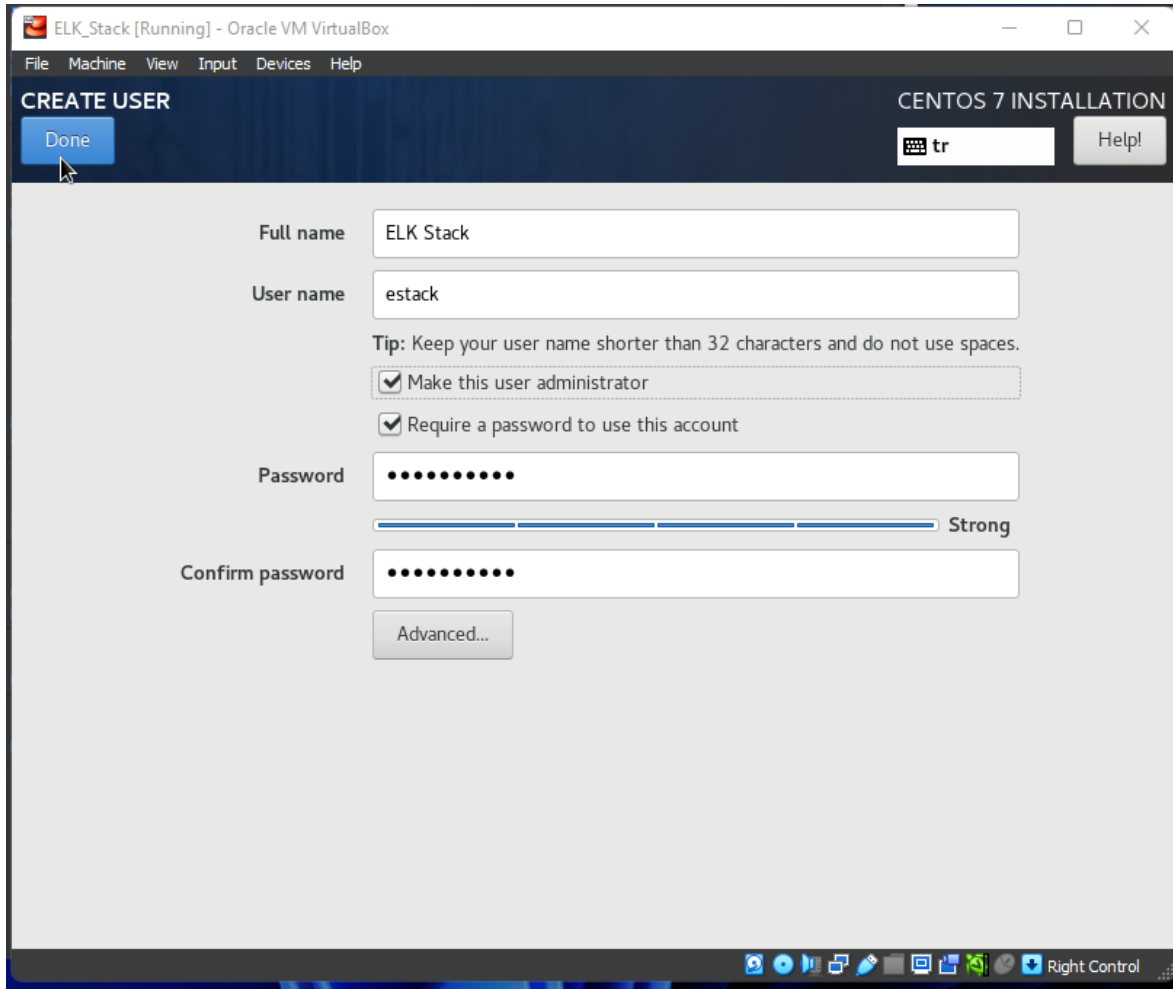


Virtual Machine **

Root Password : havelsan06

User Name : estack (Administrator)

Estack Password : havelsan57



Datasets:

<https://www.kaggle.com/datasets/rmisra/news-category-dataset?resource=download>

<https://www.kaggle.com/datasets/tmdb/tmdb-movie-metadata>

<https://www.kaggle.com/datasets/carrie1/ecommerce-data>

Insert News Data

Kibana – Machine Learning – Data Visualizer – Select or Drag and Drop a File **

The screenshot shows the Elastic Data Visualizer interface. The left sidebar contains navigation options: Overview, Notifications, Anomaly Detection, Anomaly Explorer, Single Metric Viewer, Settings, Data Frame Analytics, Jobs, Results Explorer, Analytics Map, Model Management, Trained Models, Nodes, Data Visualizer, File, Data View, AIOps Labs, Explain Log Rate Spikes, and Log Pattern Analysis. The main content area is titled 'Data Visualizer' and 'News_Category_Dataset_v3.json'. It displays the 'File contents' section with a list of 7 lines of JSON data. Below this is a 'Summary' section with a table showing the number of lines analyzed (1000), format (ndjson), time field (date), and time format (ISO8601). The 'File stats' section shows a table with columns for Field name, Field type, Documents (%), and Distinct values. The table lists fields: Type, Name, authors, category, date, headline, link, and short_description. The 'Import' button is visible at the bottom left.

The screenshot shows the Elastic Data Visualizer interface. The left sidebar contains navigation options: Overview, Notifications, Anomaly Detection, Anomaly Explorer, Single Metric Viewer, Settings, Data Frame Analytics, Jobs, Results Explorer, Analytics Map, Model Management, Trained Models, Nodes, Data Visualizer, File, Data View, AIOps Labs, Explain Log Rate Spikes, and Log Pattern Analysis. The main content area is titled 'Data Visualizer' and 'News_Category_Dataset_v3.json'. It displays the 'Import data' section with a 'Simple' tab selected. The 'Index name' field is set to 'news_headlines'. The 'Create data view' checkbox is checked. The 'Import' button is visible at the bottom left.

elastic Find apps, content, and more.

Machine Learning **Data Visualizer** **File**

Data Visualizer

News_Category_Dataset_v3.json

Import data
Simple Advanced

Index name
news_headlines

☒ Create data view

Import

File processed Index created Ingest pipeline created Uploading data Create data view

Uploading data

elastic Find apps, content, and more.

Machine Learning **Data Visualizer** **File**

Data Visualizer

News_Category_Dataset_v3.json

Import data
Simple Advanced

Index name
news_headlines

☒ Create data view

Reset

File processed Index created Ingest pipeline created Data uploaded Data view created

Import complete				
Index	news_headlines			
Data view	news_headlines			
Ingest pipeline	news_headlines-pipeline			
Documents ingested	209527			

View index in Discover Index Management Data View Management Create Filebeat configuration Open in Data Visualizer

Home - Management – Dev Tools

Data Visualizer

News_Category_Dataset_v3.json

Import data
Simple Advanced

Index name
news_headlines

☒ Create data view

Reset

File processed Index created Ingest pipeline created Data uploaded Data view created

Import complete

Index	news_headlines
Data view	news_headlines
Ingest pipeline	news_headlines-pipeline
Documents ingested	209527

View index in Discover Index Management Data View Management Create Filebeat configuration Open in Data Visualizer

Dev Tools

Console Search Profiler Grok Debugger Painless Lab

History Settings Variables Help

1 GET news_headlines_search

```

{
  "took": 0,
  "timed_out": false,
  "_shards": {
    "total": 1,
    "successful": 1,
    "skipped": 0,
    "failed": 0
  },
  "hits": {
    "total": {
      "value": 10000,
      "max_score": 1
    },
    "hits": [
      {
        "_index": "news_headlines",
        "_id": "QWv_04V6f4trvclUde",
        "_score": 1,
        "_source": {
          "date": "2022-09-23",
          "short_description": "Health experts said it is too early to predict whether demand would match up with the 171 million doses of the new boosters the U.S. ordered for the fall.",
          "timestamp": "2022-09-23T00:00:00-08:00",
          "link": "https://www.huffpost.com/entry/covid-boosters-uptake-us_n_632d730e4b087faefea0c9",
          "category": "U.S. NEWS",
          "headline": "Over 4 Million Americans Roll up Sleeves For Octon-Targeted COVID Boosters",
          "authors": "Carla K. Johnson, AP"
        }
      },
      {
        "_index": "news_headlines",
        "_id": "QWv_04V6f4trvclUde",
        "_score": 1,
        "_source": {
          "date": "2022-09-23",
          "short_description": "He was subdued by passengers and crew when he fled to the back of the aircraft after the confrontation, according to the U.S. attorney's office in Los Angeles.",
          "timestamp": "2022-09-23T00:00:00-08:00",
          "link": "https://www.huffpost.com/entry/american-air-lines-passenger-banned-flight-attendant-punch-justice-department_n_632e35d4b0824780830fa",
          "category": "U.S. NEWS",
          "headline": "American Airlines Flyer Charged, Banned For Life After Punching Flight Attendant On Video",
          "authors": "Mary Papenfuss"
        }
      },
      {
        "_index": "news_headlines",
        "_id": "QWv_04V6f4trvclUde",
        "_score": 1,
        "_source": {
          "date": "2022-09-23",
          "short_description": "You have a dog you don't understand what could he mean.",
          "timestamp": "2022-09-23T00:00:00-08:00",
          "link": "https://www.huffpost.com/entry/funniest-tweets-cats-dogs-september-17-23_n_632e35d4b0824780830fa",
          "category": "COMEDY",
          "headline": "23 Of The Funniest Tweets About Cats And Dogs This Week (Sept. 17-23)",
          "authors": "Tilopa Naeem"
        }
      }
    ]
  }
}

```

```

1 GET news_headlines_search
2
3 GET news_headlines_search
4 # Total Number of Hits ("relation": "eq")
5 GET news_headlines_search
6 {
7   "track_total_hits": true
8 }
9
10 # Search for date within a specific time range
11 GET news_headlines_search
12 {
13   "query": {
14     "range": {
15       "date": {
16         "gte": "2021-09-20",
17         "lte": "2021-09-22"
18       }
19     }
20 }
21 }
22
23
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```

```

1 {
2   "took": 8,
3   "timed_out": false,
4   "_shards": {
5     "total": 1,
6     "successful": 1,
7     "skipped": 0,
8     "failed": 0
9   },
10  "hits": {
11    "total": {
12      "value": 20027,
13      "relation": "eq"
14    },
15    "max_score": 1,
16    "hits": [
17      {
18        "_index": "news_headlines",
19        "_id": "QWv_Q0v8F4cvvL8u4D",
20        "_score": 1,
21        "_source": {
22          "date": "2022-09-23",
23          "short_description": "Health experts said it is too early to predict whether demand would match up with the 171 million doses of the new boosters the U.S. ordered for the fall.",
24          "timestamp": "2022-09-23T00:00:00.000+03:00",
25          "link": "https://www.huffpost.com/entry/covid-boosters-uptake-us_n_632d716e40807faefac9c",
26          "category": "U.S. NEWS",
27          "headline": "Over 4 Million Americans Roll up Sleeves for Omicron-Targeted COVID Boosters",
28          "authors": "Carla K. Johnson, AP"
29        }
30      },
31      {
32        "_index": "news_headlines",
33        "_id": "QWv_Q0v8F4cvvL8u4D",
34        "_score": 1,
35        "_source": {
36          "date": "2022-09-23",
37          "short_description": "He was subdued by passengers and crew when he fled to the back of the aircraft after the confrontation, according to the U.S. attorney's office in Los Angeles.",
38          "timestamp": "2022-09-23T00:00:00.000+03:00",
39          "link": "https://www.huffpost.com/entry/american-airlines-passenger-banned-flight-attendant-punch-justice-department_n_632d716e40807faefac9c",
40          "category": "U.S. NEWS",
41          "headline": "American Airlines Flyer Charged, Banned For Life After Punching Flight Attendant On Video",
42          "authors": "Mary Papenfuss"
43        }
44      },
45      {
46        "_index": "news_headlines",
47        "_id": "QWv_Q0v8F4cvvL8u4D",
48        "_score": 1,
49        "_source": {
50          "date": "2022-09-23",
51          "short_description": "Until you have a dog you don't understand what could be eaten.",
52          "timestamp": "2022-09-23T00:00:00.000+03:00",
53          "link": "https://www.huffpost.com/entry/funniest-tweets-cats-dogs-september-17-23_n_632d716e40807faefac9c",
54          "category": "COMEDY",
55          "headline": "72 Of The Funniest Tweets About Cats And Dogs This Week (Sept. 17-23)",
56          "authors": "Elyse Sanchez"
57        }
58      }
59    ]
60  }
61 }

```

```

1 # 10,000 of Hits ("relation": "gte")
2 GET news_headlines_search
3
4 # Total Number of Hits ("relation": "eq")
5 GET news_headlines_search
6 {
7   "track_total_hits": true
8 }
9
10 # Search for date within a specific time range
11 GET news_headlines_search
12 {
13   "query": {
14     "range": {
15       "date": {
16         "gte": "2021-09-20",
17         "lte": "2021-09-22"
18       }
19     }
20 }
21 }
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```

```

1 {
2   "took": 1,
3   "timed_out": false,
4   "._shards": {
5     "total": 1,
6     "successful": 1,
7     "skipped": 0,
8     "failed": 0
9   },
10  "hits": {
11    "total": {
12      "value": 8388,
13      "relation": "eq"
14    },
15    "max_score": 1,
16    "hits": [
17      {
18        "_index": "news_headlines",
19        "_id": "jm_Q0v8F4cvvL8u4D",
20        "_score": 1,
21        "_source": {
22          "date": "2021-09-21",
23          "short_description": "German publishing giant Axel Springer is closing in on a deal to buy Business Insider, in a deal that would value the web",
24          "timestamp": "2021-09-21T00:00:00.000+03:00",
25          "link": "https://www.huffpost.com/http://recode.net/2015/09/21/axel-springer-wants-to-buy-business-insider-for-around-500-million/",
26          "category": "TECH",
27          "headline": "Report: Axel Springer Eyes Purchase Of Business Insider For $500 Million",
28          "authors": "Steven Hefner"
29        }
30      },
31      {
32        "_index": "news_headlines",
33        "_id": "jm_Q0v8F4cvvL8u4D",
34        "_score": 1,
35        "_source": {
36          "date": "2021-09-22",
37          "short_description": "Dead to the rescue.",
38          "timestamp": "2021-09-22T00:00:00.000+03:00",
39          "link": "https://www.huffpost.com/entry/adorable-kid-has-a-hard-time-blowing-out-his-birthday-candle-us_5803177e08018edf8a7d",
40          "category": "PARENTING",
41          "headline": "Adorable Kid Has A Hard Time Blowing Out His Birthday Candle",
42          "authors": "Steven Hefner"
43        }
44      },
45      {
46        "_index": "news_headlines",
47        "_id": "jm_Q0v8F4cvvL8u4D",
48        "_score": 1,
49        "_source": {
50          "date": "2021-09-22",
51          "short_description": "I appreciate that [the sheriff] recognizes that I shouldn't have to take off my clothes to see my clients.",
52          "timestamp": "2021-09-22T00:00:00.000+03:00",
53          "link": "https://www.huffpost.com/entry/layers-can-keep-bras-on-while-entering-maine-jail-sheriff_us_5803177e08018edf8a7d",
54          "category": "COMEDY",
55          "headline": "Layers Can Keep Bras On While Entering Maine Jail: Sheriff",
56          "authors": ""
57        }
58      }
59    ]
60  }
61 }

```

```

1 # 10,000 of Hits ("relation": "gte")
2 GET news_headlines_search
3
4 # Total Number of Hits ("relation": "eq")
5 GET news_headlines_search
6 {
7   "track_total_hits": true
8 }
9
10 # Search for date within a specific time range
11 GET news_headlines_search
12 {
13   "query": {
14     "range": {
15       "date": {
16         "gte": "2021-09-20",
17         "lte": "2021-09-22"
18       }
19     }
20 }
21 }
22
23
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```

```

1 {
2   "took": 1,
3   "timed_out": false,
4   "._shards": {
5     "total": 1,
6     "successful": 1,
7     "skipped": 0,
8     "failed": 0
9   },
10  "hits": {
11    "total": {
12      "value": 10000,
13      "relation": "gte"
14    },
15    "max_score": 1,
16    "hits": [
17      {
18        "_index": "news_headlines",
19        "_id": "QWv_Q0v8F4cvvL8u4D",
20        "_score": 1,
21        "_source": {
22          "date": "2022-09-23",
23          "short_description": "Health experts said it is too early to predict whether demand would match up with the 171 million doses of the new boosters the U.S. ordered for the fall.",
24          "timestamp": "2022-09-23T00:00:00.000+03:00",
25          "link": "https://www.huffpost.com/entry/covid-boosters-uptake-us_n_632d716e40807faefac9c",
26          "category": "U.S. NEWS",
27          "headline": "Over 4 Million Americans Roll up Sleeves for Omicron-Targeted COVID Boosters",
28          "authors": "Carla K. Johnson, AP"
29        }
30      }
31    ]
32  }
33 }

```

```

1 # Aggregations
2 GET news_headlines_search
3 {
4   "aggs": {
5     "by_category": {
6       "terms": {
7         "field": "category",
8         "size": 100
9       }
10    }
11  }
12 }
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
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```

```

1 {
2   "took": 1,
3   "timed_out": false,
4   "._shards": {
5     "total": 1,
6     "successful": 1,
7     "skipped": 0,
8     "failed": 0
9   },
10  "aggregations": {
11    "by_category": {
12      "doc_count_error_upper_bound": 0,
13      "sum_other_doc_count": 0,
14      "buckets": [
15        {
16          "key": "POLITICS",
17          "doc_count": 3560
18        },
19        {
20          "key": "WELLNESS",
21          "doc_count": 17045
22        },
23        {
24          "key": "ENTERTAINMENT",
25          "doc_count": 17362
26        },
27        {
28          "key": "TRAVEL",
29          "doc_count": 9980
30        },
31        {
32          "key": "STYLE & BEAUTY",
33          "doc_count": 9814
34        },
35        {
36          "key": "PARENTING",
37          "doc_count": 8791
38        },
39        {
40          "key": "HEALTHY LIVING",
41          "doc_count": 8624
42        }
43      ]
44    }
45  }
46 }

```

Console

Search Profiler

Ork Debugger

Painless Lab 1015

History

Settings

Variables

Help

35

Aggregations : e.g. Popular Topics

37 GET news_headlines/news

38

39 {

40 "query": {

41 "match": {

42 "category": "ENTERTAINMENT"

43 }

44 }

45 "aggs": {

46 "popular_in_entertainment": {

47 "significant_text": {

48 "field": "headline"

49 }

50 }

51 }

53 # Search with OR logic

54 GET news_headlines/search

55 {

56 "query": {

57 "bool": {

58 "headline":

59 "query": "Bill Gates Steve Jobs"

60 }

61 }

62 }

1

{

2 "took": 18,

3 "timed_out": false,

4 "shards": {

5 "total": 1,

6 "successful": 1,

7 "skipped": 0,

8 "failed": 0

9 }

10 "hits": {

11 "total": {

12 "value": 2581,

13 "relation": "eq"

14 }

15 "max_score": 28.686939,

16 "hits": [

17 {

18 "index": "news_headlines",

19 "_id": "sig_QvB4tvcvL8Fpdy",

20 "_score": 28.686939,

21 "_source": {

22 "data": "2014-08-28",

23 "short_description": "Not long ago, Malcolm Gladwell made a bold prediction: Fifty years from now, Apple will be around and Microsoft will be gone, but Bill Gates will be remembered -- and Steve Jobs won't. As surprising as it seems, Gladwell might be right.",

24 "timestamp": "2015-01-28T00:00:00.000+08:00",

25 "link": "https://www.huffingtonpost.com/entry/legacy-wars-steve-jobs-vs-b_5721387.html",

26 "category": "TECHNOLOGY",

27 "headline": "Legacy Wars: Steve Jobs vs. Bill Gates",

28 "authors": "Adam Grant, Contributorwharton professor and author of GIVE AND TAKE and CRISDMALLS"

29 }

30 },

31 },

32 {

33 "index": "news_headlines",

34 "_id": "sig_QvB4tvcvL8Fpdy",

35 "_score": 14.931743,

36 "_source": {

37 "data": "2015-01-28",

38 "short_description": "Apple's new iPhone 6s is now on sale.",

39 "timestamp": "2015-01-28T00:00:00.000+08:00",

40 "link": "https://www.huffingtonpost.com/entry/bill-gates-apple-reddit_n_666176.html",

41 "category": "TECHNOLOGY",

42 "headline": "What Makes Bill Gates Feel 'Thupid'",

43 "authors": "Alexander C. Kaufman"

44 }

45 }

```

Console Search Profiler Grok Debugger Painless Lab 100 OK 15ms

History Settings Variables Help

49- }
50- }
51- }
52- }
53- # Search with OR logic
54- GET news_headlines/_search
55- {
56-   "query": {
57-     "match": {
58-       "headline": "Bill Gates Steve Jobs"
59-     }
60-   }
61- }
62- }
63- }
64- }
65- # Search with AND logic
66- GET news_headlines/_search
67- {
68-   "query": {
69-     "match": {
70-       "headline": {
71-         "query": "Bill Gates Steve Jobs",
72-         "operator": "and"
73-       }
74-     }
75-   }
76- }
77- }
78- # Search with "minimum_should_match"
79- GET news_headlines/_search
80- {
81-   "query": {
82-     "match": {
83-       "headline": {
84-         "query": "Bill Gates Steve Jobs ",
85-         "minimum_should_match": 2
86-       }
87-     }
88-   }
89- }
90- }
91- }
92- }
93- }
94- }
95- }
96- }
97- }
98- }
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112- }
113- }
114- }
115- }
116- }
117- }
118- }
119- }
120- }
121- }
122- }
123- }
124- }
125- }
126- }
127- }

1- {
2   "took": 1,
3   "timed_out": false,
4   "_shards": {
5     "total": 1,
6     "successful": 1,
7     "skipped": 0,
8     "failed": 0
9   },
10  "hits": {
11    "total": {
12      "value": 54,
13      "relation": "gte"
14    },
15    "max_score": 12.369803,
16    "hits": [
17      {
18        "_index": "news_headlines",
19        "_id": "shc_Q4yB4tCvLbTf3y",
20        "_score": 12.369803,
21        "_source": {
22          "date": "2014-08-25",
23          "short_description": "Not long ago, Malcolm Gladwell made a bold prediction: Fifty years from now, Apple will be around and Microsoft will be gone, but Bill Gates will be remembered -- and Steve Jobs won't. As surprising as it seems, Gladwell might be right.",
24          "timestamp": "2014-08-25T00:00:00.000+03:00",
25          "link": "https://www.huffingtonpost.com/entry/legacy-warrior-steve-jobs-vs_b_5712387.html",
26          "category": "BUSINESS",
27          "headline": "Legacy Wars: Steve Jobs vs. Bill Gates",
28          "authors": "Adam Grant, Contributor@harvard professor and author of GIVE AND TAKE AND ORIGINALS"
29        },
30      },
31      {
32        "_index": "news_headlines",
33        "_id": "shc_Q4yB4tCvLbTf3y",
34        "_score": 14.931561,
35        "_source": {
36          "date": "2015-01-30",
37          "short_description": "",
38          "timestamp": "2015-01-30T00:00:00.000+02:00",
39          "link": "https://www.huffingtonpost.com/entry/bill-gates-ama-reddit_n_6465178.html",
40          "category": "BUSINESS",
41          "headline": "What Makes Bill Gates Feel 'Stupid'",
42          "authors": "Alexander C. Kaufman"
43        },
44      },
45      {
46        "_index": "news_headlines",
47        "_id": "hsc_Q4yB4tCvLbTf3y",
48        "_score": 14.429291,
49        "_source": {
50          "date": "2015-10-01",
51          "short_description": "\"Stay hungry. Stay foolish.\"",
52          "timestamp": "2015-10-01T00:00:00.000+03:00",
53          "link": "https://www.huffingtonpost.com/entry/steve-jobs-quotes_us_5b8c3cf6b0bf706df3c70",
54          "category": "TECH",
55          "headline": "11 Unforgettable Lessons Steve Jobs Taught Us",
56          "authors": "Lorenzo Ligato"
57        },
58      },
59    ]
60  }
}

```

```

Console Search Profiler Grok Debugger Painless Lab 100 OK 15ms

History Settings Variables Help

71- {
72-   "query": "Bill Gates Steve Jobs",
73-   "operator": "and"
74- }
75- }
76- }
77- }
78- # Search with "minimum_should_match"
79- GET news_headlines/_search
80- {
81-   "query": {
82-     "match": {
83-       "headline": {
84-         "query": "Bill Gates Steve Jobs ",
85-         "minimum_should_match": 2
86-       }
87-     }
88-   }
89- }
90- }
91- # Search a Phrase
92- GET news_headlines/_search
93- {
94-   "query": {
95-     "match": {
96-       "headline": {
97-         "query": "Shape of you"
98-       }
99-     }
100-   }
101- }
102- }
103- }
104- }
105- }
106- }
107- }
108- }
109- }
110- }
111- }
112- }
113- }
114- }
115- }
116- }
117- }
118- }
119- }
120- }
121- }
122- }
123- }
124- }
125- }
126- }
127- }

1- {
2   "took": 272,
3   "timed_out": false,
4   "_shards": {
5     "total": 1,
6     "successful": 1,
7     "skipped": 0,
8     "failed": 0
9   },
10  "hits": {
11    "total": {
12      "value": 10000,
13      "relation": "gte"
14    },
15    "max_score": 12.369803,
16    "hits": [
17      {
18        "_index": "news_headlines",
19        "_id": "shc_Q4yB4tCvLbTf3y",
20        "_score": 12.369803,
21        "_source": {
22          "date": "2012-08-30",
23          "short_description": "Get stronger. Practice wall squats (with back against the wall, lower your body until knees are at 90 degrees; hold for 30",
24          "timestamp": "2012-08-30T00:00:00.000+03:00",
25          "link": "https://www.huffingtonpost.com/entry/fitness-test-women_us_5b8c2c91e4b83a1dc7cda8e",
26          "category": "WELLNESS",
27          "headline": "Fitness Test: Are You In Shape?",
28          "authors": ""
29        },
30      },
31      {
32        "_index": "news_headlines",
33        "_id": "shc_Q4yB4tCvLbTf3y",
34        "_score": 12.164961,
35        "_source": {
36          "date": "2017-03-28",
37          "short_description": "Puerto Rico's Zion & Lennox are behind the new version.",
38          "timestamp": "2017-03-28T00:00:00.000+03:00",
39          "link": "https://www.huffingtonpost.com/entry/ed-sheeran-zion-lennox-shape-of-you-latin-remix_us_5b8d3b0e4b0b71dcf72c6f",
40          "category": "LATINO VOICES",
41          "headline": "Ed Sheeran's 'Shape Of You' Gets An Unexpected Latin Remix",
42          "authors": "Carolina Moreno"
43        },
44      },
45      {
46        "_index": "news_headlines",
47        "_id": "shc_Q4yB4tCvLbTf3y",
48        "_score": 11.229876,
49        "_source": {
50          "date": "2014-08-00",
51          "short_description": "",
52          "timestamp": "2014-08-00T00:00:00.000+03:00",
53          "link": "https://www.huffingtonpost.com/entry/work-success-study_n_5635227.html",
54          "category": "BUSINESS",
55          "headline": "The Shape Of Your Face May Affect How Much Money You Make",
56          "authors": "Kevin Short"
57        },
58      },
59    ]
60  }
}

```

Console Search Profiler Grok Debugger Painless Lab BETA

History Settings Variables Help

```

71      "query": "Bill Gates Steve Jobs",
72      "operator": "and"
73    }
74  }
75  }
76  }
77
78 # Search with "minimum_should_match"
79 GET news_headlines/_search
80 {
81   "query": {
82     "match": {
83       "headline": {
84         "query": "Bill Gates Steve Jobs ",
85         "minimum_should_match": 2
86       }
87     }
88   }
89 }
90
91 # Search a Phrase *** match
92 GET news_headlines/_search
93 {
94   "query": {
95     "match": {
96       "headline": {
97         "query": "Shape of you"
98       }
99     }
100   }
101 }
102
103 # Search a Phrase *** match_phrase
104 GET news_headlines/_search
105 {
106   "query": {
107     "match_phrase": {
108       "headline": {
109         "query": "Shape of you"
110       }
111     }
112   }
113 }
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131

```

```

1- {
2   "took": 21,
3   "timed_out": false,
4   "_shards": {
5     "total": 1,
6     "successful": 1,
7     "skipped": 0,
8     "failed": 0
9   },
10  "hits": {
11    "total": {
12      "value": 3,
13      "relation": "eq"
14    },
15    "max_score": 12.164961,
16    "hits": [
17      {
18        "_index": "news_headlines",
19        "_id": "shc_Q4VBf4tcvVL80X54",
20        "_score": 12.164961,
21        "_source": {
22          "date": "2017-03-28",
23          "short_description": "Puerto Rico's Zion & Lennox are behind the new version.",
24          "timestamp": "2017-03-28T00:00:00.000+03:00",
25          "link": "https://www.huffingtonpost.com/entry/ed-sheeran-zion-lennox-shape-of-you-latin-remix_us_58d03b09e4b0be71dcf72c6f",
26          "category": "LATINO VOICES",
27          "headline": "Ed Sheeran's 'Shape Of You' Gets An Unexpected Latin Remix",
28          "authors": "Carolina Moreno"
29        }
30      },
31      {
32        "_index": "news_headlines",
33        "_id": "shc_Q4VBf4tcvVL80X55",
34        "_score": 10.814247,
35        "_source": {
36          "date": "2017-02-28",
37          "short_description": "And now I'm singing like... 🎤",
38          "timestamp": "2017-02-28T00:00:00.000+03:00",
39          "link": "https://www.huffingtonpost.com/entry/ed-sheeran-jimmy-fallon-classroom-instruments_us_58b54f43e4b060480e0b8fcd",
40          "category": "ENTERTAINMENT",
41          "headline": "Ed Sheeran Joins Jimmy Fallon To Play 'Shape Of You' On Classroom Instruments",
42          "authors": "Lee Moran"
43        }
44      },
45      {
46        "_index": "news_headlines",
47        "_id": "mBc_Q4VBf4tcvVL8PCMU",
48        "_score": 10.814247,
49        "_source": {
50          "date": "2017-02-06",
51          "short_description": "Can they please collaborate more?!",
52          "timestamp": "2017-02-06T00:00:00.000+03:00",
53          "link": "https://www.huffingtonpost.com/entry/the-vamps-conor-maynard_us_5898ecfde4bc1284f27ae63",
54          "category": "ENTERTAINMENT",
55          "headline": "The Vamps And Conor Maynard Absolutely Slay This 'Shape Of You' Sing-Off",
56          "authors": "Minou Clark"
57        }
58      }
59    ]
60  }
61 }

```

Console Search Profiler Grok Debugger Painless Lab BETA

History Settings Variables Help

```

94   "query": {
95     "match": {
96       "headline": {
97         "query": "Shape of you"
98       }
99     }
100   }
101 }
102
103 # Search a Phrase *** match_phrase
104 GET news_headlines/_search
105 {
106   "query": {
107     "match_phrase": {
108       "headline": {
109         "query": "Shape of you"
110       }
111     }
112   }
113 }
114
115 # Search a Phrase *** multi_match
116 GET news_headlines/_search
117 {
118   "query": {
119     "multi_match": {
120       "query": "J.K Rowling",
121       "fields": [
122         "headline",
123         "short_description",
124         "authors"
125       ]
126     }
127 }
128
129 # Search a Phrase *** multi_match && Per-field boosting
130 GET news_headlines/_search
131 {
132   "query": {
133     "multi_match": {
134       "query": "Michelle Obama",
135       "fields": [
136         "headline",
137         "short_description",
138         "authors"
139       ]
140     }
141 }
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156

```

```

10- "hits": {
11   "total": {
12     "value": 5219,
13     "relation": "eq"
14   },
15   "max_score": 26.927974,
16   "hits": [
17     {
18       "_index": "news_headlines",
19       "_id": "shc_Q4VBf4tcvVL80X54",
20       "_score": 26.927974,
21       "_source": {
22         "date": "2015-03-23",
23         "short_description": "The first lady is becoming a prime-time regular.",
24         "timestamp": "2015-03-23T00:00:00.000+02:00",
25         "link": "https://www.huffingtonpost.com/entry/michelle-obama-ncis_us_571ad6c0d000041d0d0544",
26         "category": "POLITICS",
27         "headline": "Michelle Obama Appears On 'Jeopardy!'",
28         "authors": "Jason Ferguson"
29       }
30     },
31     {
32       "_index": "news_headlines",
33       "_id": "shc_Q4VBf4tcvVL80X55",
34       "_score": 25.585997,
35       "_source": {
36         "date": "2015-04-22",
37         "short_description": "The first lady is becoming a prime-time regular.",
38         "timestamp": "2015-04-22T00:00:00.000+03:00",
39         "link": "https://www.huffingtonpost.com/entry/michelle-obama-ncis_us_571ad6c0d000041d0d0544",
40         "category": "POLITICS",
41         "headline": "Michelle Obama To Appear On 'NCIS'",
42         "authors": "Mariah Stewart"
43       }
44     },
45     {
46       "_index": "news_headlines",
47       "_id": "shc_Q4VBf4tcvVL80X56",
48       "_score": 25.863351,
49       "_source": {
50         "date": "2012-03-20",
51         "short_description": "At the end of a long day, what do the president of the United States and the first lady talk about? That's what David Letterman",
52         "timestamp": "2012-03-20T00:00:00.000+02:00",
53         "link": "https://www.huffingtonpost.com/entry/obama-harriage_us_589578de0e041dc776c7c",
54         "category": "POLITICS",
55         "headline": "Obama Marriage: Michelle Obama Talks Private Conversations With President Barack Obama (VIDEO)",
56         "authors": "
57       }
58     },
59     {
60       "_index": "news_headlines",
61       "_id": "shc_Q4VBf4tcvVL80X57",
62       "_score": 25.344862,
63       "_source": {
64         "date": "2017-08-24",
65         "short_description": "Her stance is deeply rooted.",
66         "timestamp": "2017-08-24T00:00:00.000+03:00",
67         "link": "https://www.huffingtonpost.com/entry/michelle-obama-beets_us_598cf4e0b0607e339b0d1",
68         "category": "FOOD",
69         "headline": "There's One Vegetable Michelle Obama Truly Hates",
70         "authors": "Jamie Felman"
71       }
72     }
73   ]
74 }

```

Michelle Obama 1 of 11 20 / OK 45 ms

[illegible]

elastic

Find apps, content, and more.

Dev Tools

Console

Console

Search Profiler

Grok Debugger

Painless Lab

BETA

History

Settings

Variables

Help

```
281 # Create a new index(ecommerce_data) with the following mapping.
282 PUT ecommerce_data
283 {
284   "mappings": {
285     "properties": {
286       "Country": {
287         "type": "keyword"
288       },
289       "CustomerID": {
290         "type": "long"
291       },
292       "Description": {
293         "type": "text"
294       },
295       "InvoiceDate": {
296         "type": "date",
297         "format": "M/d/yyyy H:m"
298       },
299       "InvoiceNo": {
300         "type": "keyword"
301       },
302       "Quantity": {
303         "type": "long"
304       },
305       "StockCode": {
306         "type": "keyword"
307       },
308       "UnitPrice": {
309         "type": "double"
310       }
311     }
312   }
313 }
314
315 # Reindex the data from the original index(source) to the one you just created(destination)
316 POST _reindex
317 {
318   "source": {
319     "index": "e-commerce_data"
320   },
321   "dest": {
322     "index": "ecommerce_data"
323   }
324 }
325
```

```
1 {
2   "took": 14564,
3   "timed_out": false,
4   "total": 541909,
5   "updated": 0,
6   "created": 541909,
7   "deleted": 0,
8   "batches": 542,
9   "version_conflicts": 0,
10  "noops": 0,
11  "retries": {
12    "bulk": 0,
13    "search": 0
14  },
15  "throttled_millis": 0,
16  "requests_per_second": -1,
17  "throttled_until_millis": 0,
18  "failures": []
19 }
```

History	Settings	Variables	Help
314			
315	# Reindex the data from the original index(source) to the one you just created(destination)		
316	POST _reindex		
317	{		
318	"source": {		
319	"index": "e-commerce_data"		
320	},		
321	"dest": {		
322	"index": "ecommerce_data"		
323	}		
324	}		
325			
326	# Metric Aggregations - SUM MIN MAX AVG		
327	# "size": 0 ---> No Need to Top 10 Hits *		
328	GET ecommerce_data/_search		
329	{		
330	"size": 0,		
331	"aggs": {		
332	"sum_unit_price": {		
333	"sum": {		
334	"field": "UnitPrice"		
335	}		
336	}		
337	}		
338	}		
339			

1	{
2	"took": 29,
3	"timed_out": false,
4	"_shards": {
5	"total": 1,
6	"successful": 1,
7	"skipped": 0,
8	"failed": 0
9	},
10	"hits": {
11	"total": {
12	"value": 10000,
13	"relation": "gte"
14	},
15	"max_score": null,
16	"hits": []
17	},
18	"aggregations": {
19	"sum_unit_price": {
20	"value": 2498803.974
21	}
22	}
23	}

Console	Search Profiler	Grok Debugger	Painless Lab	BETA
History	Settings	Variables	Help	
374				
375				
376	# Metric Aggregations - SUM MIN MAX AVG			
377	# All in One with "Stats"			
378	GET ecommerce_data/_search			
379	{			
380	"size": 0,			
381	"aggs": {			
382	"all_stats_unit_price": {			
383	"stats": {			
384	"field": "UnitPrice"			
385	}			
386	}			
387	}			
388	}			
389				
390				
391				
392				
393				
394				
395				
396				
397				
398				
399				
400				

1	{
2	"took": 0,
3	"timed_out": false,
4	"_shards": {
5	"total": 1,
6	"successful": 1,
7	"skipped": 0,
8	"failed": 0
9	},
10	"hits": {
11	"total": {
12	"value": 10000,
13	"relation": "gte"
14	},
15	"max_score": null,
16	"hits": []
17	},
18	"aggregations": {
19	"all_stats_unit_price": {
20	"count": 541909,
21	"min": -11062.06,
22	"max": 38970,
23	"avg": 4.61113626088513,
24	"sum": 2498803.974
25	}
26	}
27	}

Console	Search Profiler	Grok Debugger	Painless Lab	BETA
History	Settings	Variables	Help	
374				
375				
376	# Metric Aggregations - SUM MIN MAX AVG			
377	# All in One with "Stats"			
378	GET ecommerce_data/_search			
379	{			
380	"size": 0,			
381	"aggs": {			
382	"all_stats_unit_price": {			
383	"stats": {			
384	"field": "UnitPrice"			
385	}			
386	}			
387	}			
388	}			
389				
390				
391	# Metric Aggregations - SUM MIN MAX AVG			
392	# Distinct Count for Given Field (CARDINALITY)			
393	GET ecommerce_data/_search			
394	{			
395	"size": 0,			
396	"aggs": {			
397	"number_unique_customers": {			
398	"cardinality": {			
399	"field": "CustomerID"			
400	}			
401	}			
402	}			
403	}			
404				

1	{
2	"took": 0,
3	"timed_out": false,
4	"_shards": {
5	"total": 1,
6	"successful": 1,
7	"skipped": 0,
8	"failed": 0
9	},
10	"hits": {
11	"total": {
12	"value": 10000,
13	"relation": "gte"
14	},
15	"max_score": null,
16	"hits": []
17	},
18	"aggregations": {
19	"all_stats_unit_price": {
20	"count": 541909,
21	"min": -11062.06,
22	"max": 38970,
23	"avg": 4.61113626088513,
24	"sum": 2498803.974
25	}
26	}
27	}

History Settings Variables Help

```

405 # Metric Aggregations - SUM | MIN | MAX | AVG
406 # The Average of unit price of items sold in Germany
407 GET ecommerce_data/_search
408 {
409   "size": 0,
410   "query": {
411     "match": {
412       "Country": "Germany"
413     }
414   },
415   "aggs": {
416     "germany_average_unit_price": {
417       "avg": {
418         "field": "UnitPrice"
419       }
420     }
421   }
422 }

```

```

1- {
2   "took": 14,
3   "timed_out": false,
4   "_shards": {
5     "total": 1,
6     "successful": 1,
7     "skipped": 0,
8     "failed": 0
9   },
10  "hits": {
11    "total": {
12      "value": 9495,
13      "relation": "eq"
14    },
15    "max_score": null,
16    "hits": []
17  },
18  "aggregations": {
19    "germany_average_unit_price": {
20      "value": 3.9669299631384938
21    }
22  }
23 }

```

Console Search Profiler Grok Debugger Painless Lab BETA

History Settings Variables Help

```

424 # Buckets Aggregations : Date Histograms Aggs, Histogram Aggs, Range Aggs, Terms Aggs
425 #
426 #
427 # Date Histogram Aggs: Fixed OR Calendar _interval
428
429 GET ecommerce_data/_search
430 {
431   "size": 0,
432   "aggs": {
433     "transactions_by_8_hrs": {
434       "date_histogram": {
435         "field": "InvoiceDate",
436         "fixed_interval": "8h"
437       }
438     }
439   }
440 }

```

```

1- {
2   "took": 52,
3   "timed_out": false,
4   "_shards": {
5     "total": 1,
6     "successful": 1,
7     "skipped": 0,
8     "failed": 0
9   },
10  "hits": {
11    "total": {
12      "value": 10000,
13      "relation": "gte"
14    },
15    "max_score": null,
16    "hits": []
17  },
18  "aggregations": {
19    "transactions_by_8_hrs": {
20      "buckets": [
21        {
22          "key_as_string": "12/1/2010 8:0",
23          "key": 1291190400000,
24          "doc_count": 2301
25        },
26        {
27          "key_as_string": "12/1/2010 16:0",
28          "key": 1291219200000,
29          "doc_count": 807
30        },
31        {
32          "key_as_string": "12/2/2010 0:0",
33          "key": 1291248000000,
34          "doc_count": 10
35        },
36        {
37          "key_as_string": "12/2/2010 8:0",
38          "key": 1291276800000,
39          "doc_count": 1608
40        }
41      ]
42    }
43  }

```

History Settings Variables Help

```

432-   "aggs": {
433-     "transactions_by_8_hrs":{
434-       "date_histogram": {
435-         "field": "InvoiceDate",
436-         "fixed_interval": "8h"
437-       }
438-     }
439-   }
440- }
441-
442- # Date Histogram Aggs: Fixed OR Calendar _interval
443- # Calendar Interval
444- GET ecommerce_data/_search
445- {
446-   "size": 0,
447-   "aggs": {
448-     "transactions_by_month":{
449-       "date_histogram": {
450-         "field": "InvoiceDate",
451-         "calendar_interval": "1M"
452-       }
453-     }
454-   }
455- }
456-
457- # Date Format      : "key_as_string": "1/1/2011 0:0",
458- # Timestamp Format : "key": 1293840000000,
459-
460- # Date Histogram Aggs: Fixed OR Calendar _interval
461- # Calendar Interval with DESC Order
462- GET ecommerce_data/_search
463- {
464-   "size": 0,
465-   "aggs": {
466-     "transactions_by_month":{
467-       "date_histogram": {
468-         "field": "InvoiceDate",
469-         "calendar_interval": "1M",
470-         "order": {
471-           "_key": "desc"
472-         }
473-       }
474-     }
475-   }
476- }
477-
478-
479-
480-
481-
482-
483-
484-
485-
486-
487-
488-
489-
490-
491-
492-
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517-
518-
519-
520-
521-
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525-
526-
527-
528-

```

```

1- {
2-   "took": 1,
3-   "timed_out": false,
4-   "_shards": {
5-     "total": 1,
6-     "successful": 1,
7-     "skipped": 0,
8-     "failed": 0
9-   },
10-   "hits": {
11-     "total": {
12-       "value": 10000,
13-       "relation": "gte"
14-     },
15-     "max_score": null,
16-     "hits": []
17-   },
18-   "aggregations": {
19-     "transactions_by_month": {
20-       "buckets": [
21-         {
22-           "key_as_string": "12/1/2011 0:0",
23-           "key": 1322697600000,
24-           "doc_count": 25525
25-         },
26-         {
27-           "key_as_string": "11/1/2011 0:0",
28-           "key": 1320105600000,
29-           "doc_count": 84711
30-         },
31-         {
32-           "key_as_string": "10/1/2011 0:0",
33-           "key": 1317427200000,
34-           "doc_count": 60742
35-         },
36-         {
37-           "key_as_string": "9/1/2011 0:0",
38-           "key": 1314835200000,
39-           "doc_count": 50226
40-         },
41-         {
42-           "key_as_string": "8/1/2011 0:0",
43-           "key": 1312156800000,
44-           "doc_count": 35284
45-         },
46-         {
47-           "key_as_string": "7/1/2011 0:0",
48-           "key": 1309478400000,
49-           "doc_count": 39518
50-         },
51-         {
52-           "key_as_string": "6/1/2011 0:0",
53-           "key": 1306886400000,
54-           "doc_count": 36874
55-         },
56-         {
57-           "key_as_string": "5/1/2011 0:0",
58-           "key": 1304208000000,
59-           "doc_count": 37030
60-         }

```

History Settings Variables Help

```

463- {
464-   "size": 0,
465-   "aggs": {
466-     "transactions_by_month":{
467-       "date_histogram": {
468-         "field": "InvoiceDate",
469-         "calendar_interval": "1M",
470-         "order": {
471-           "_key": "desc"
472-         }
473-       }
474-     }
475-   }
476- }
477-
478- # Histogram
479- GET ecommerce_data/_search
480- {
481-   "size": 0,
482-   "aggs": {
483-     "transactions_per_price_interval":{
484-       "histogram": {
485-         "field": "UnitPrice",
486-         "interval": 10,
487-         "order": {
488-           "_key": "desc"
489-         }
490-       }
491-     }
492-   }
493- }
494-
495-
496-
497-
498-
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```

```

15547-   },
15548-   "doc_count": 62
15549- },
15550- {
15551-   "key": 150,
15552-   "doc_count": 38
15553- },
15554- {
15555-   "key": 140,
15556-   "doc_count": 47
15557- },
15558- {
15559-   "key": 130,
15560-   "doc_count": 34
15561- },
15562- {
15563-   "key": 120,
15564-   "doc_count": 100
15565- },
15566- {
15567-   "key": 110,
15568-   "doc_count": 38
15569- },
15570- {
15571-   "key": 100,
15572-   "doc_count": 24
15573- },
15574- {
15575-   "key": 90,
15576-   "doc_count": 21
15577- },
15578- {
15579-   "key": 80,
15580-   "doc_count": 62
15581- },
15582- {
15583-   "key": 70,
15584-   "doc_count": 34
15585- },
15586- {
15587-   "key": 60,
15588-   "doc_count": 35
15589- },
15590- {
15591-   "key": 50,
15592-   "doc_count": 228
15593- },
15594- {
15595-   "key": 40,
15596-   "doc_count": 204
15597- },
15598- {
15599-   "key": 30,
15600-   "doc_count": 419
15601- },
15602- {
15603-   "key": 20,
15604-   "doc_count": 2135
15605- },
15606- {
15607-   "key": 10,
15608-   "doc_count": 20863
15609- },
15610- {
15611-   "key": 0,
15612-   "doc_count": 516869

```

History Settings Variables Help

```

519
520 # Terms Aggregation
521 # By default, the terms aggregation sorts buckets based on the "doc_count" values in descending order.
522 GET ecommerce_data/_search
523 {
524   "size": 0,
525   "aggs": {
526     "top_5_customers": {
527       "terms": {
528         "field": "CustomerID",
529         "size": 5
530       }
531     }
532   }
533 }
534
535 # Terms Aggregation
536 # To reverse this order, you can add an order parameter to the aggregation.
537 GET ecommerce_data/_search
538 {
539   "size": 0,
540   "aggs": {
541     "5_customers_with_lowest_number_of_transactions": {
542       "terms": {
543         "field": "CustomerID",
544         "size": 5,
545         "order": {
546           "_count": "asc"
547         }
548       }
549     }
550   }
551 }
552
553
554
555
556
557
558
559
560
561
562
563
564
565
566
567
568
569
570
571
572
573
574
575
576
577 # Calculating multiple metrics per bucket
578 GET ecommerce_data/_search
579 {
580   "size": 0,
581   "aggs": {
582     "transactions_per_day": {
583       "date_histogram": {
584         "field": "InvoiceDate",
585         "calendar_interval": "day"
586       },
587       "aggs": {
588         "daily_revenue": {
589           "sum": {
590             "script": {
591               "source": "doc['UnitPrice'].value * doc['Quantity'].value"
592             }
593           }
594         },
595         "number_of_unique_customers_per_day": {
596           "cardinality": {
597             "field": "CustomerID"
598           }
599         }
600       }
601     }
602   }
603 }
604
605
606
607
608
609
610

```

```

1- {
2   "took": 15,
3   "timed_out": false,
4   "_shards": {
5     "total": 1,
6     "successful": 1,
7     "skipped": 0,
8     "failed": 0
9   },
10  "hits": {
11    "total": {
12      "value": 10000,
13      "relation": "gte"
14    },
15    "max_score": null,
16    "hits": []
17  },
18  "aggregations": {
19    "5_customers_with_lowest_number_of_transactions": {
20      "doc_count_error_upper_bound": -1,
21      "sum_other_doc_count": 406824,
22      "buckets": [
23        {
24          "key": 12503,
25          "doc_count": 1
26        },
27        {
28          "key": 12505,
29          "doc_count": 1
30        },
31        {
32          "key": 12943,
33          "doc_count": 1
34        },
35        {
36          "key": 13017,
37          "doc_count": 1
38        },
39        {
40          "key": 13090,
41          "doc_count": 1
42        }
43      ]
44    }
45  }
46 }

```

Dev Tools Console

Console

Console Search Profiler Grok Debugger Painless Lab BETA

History Settings Variables Help

```

553 ## Combined Aggregations
554 # Calculate the daily revenue
555 GET ecommerce_data/_search
556 {
557   "size": 0,
558   "aggs": {
559     "transactions_per_day": {
560       "date_histogram": {
561         "field": "InvoiceDate",
562         "calendar_interval": "day"
563       },
564       "aggs": {
565         "daily_revenue": {
566           "sum": {
567             "script": {
568               "source": "doc['UnitPrice'].value * doc['Quantity'].value"
569             }
570           }
571         }
572       }
573     }
574   }
575 }
576
577 # Calculating multiple metrics per bucket
578 GET ecommerce_data/_search
579 {
580   "size": 0,
581   "aggs": {
582     "transactions_per_day": {
583       "date_histogram": {
584         "field": "InvoiceDate",
585         "calendar_interval": "day"
586       },
587       "aggs": {
588         "daily_revenue": {
589           "sum": {
590             "script": {
591               "source": "doc['UnitPrice'].value * doc['Quantity'].value"
592             }
593           }
594         },
595         "number_of_unique_customers_per_day": {
596           "cardinality": {
597             "field": "CustomerID"
598           }
599         }
600       }
601     }
602   }
603 }
604
605
606
607
608
609
610

```

```

19  "transactions_per_day": {
20    "buckets": [
21      {
22        "key_as_string": "12/1/2010 0:0",
23        "key": 1291161600000,
24        "doc_count": 3108,
25        "number_of_unique_customers_per_day": {
26          "value": 98
27        },
28        "daily_revenue": {
29          "value": 58635.56
30        }
31      },
32      {
33        "key_as_string": "12/2/2010 0:0",
34        "key": 1291248000000,
35        "doc_count": 2109,
36        "number_of_unique_customers_per_day": {
37          "value": 117
38        },
39        "daily_revenue": {
40          "value": 46207.28
41        }
42      },
43      {
44        "key_as_string": "12/3/2010 0:0",
45        "key": 1291334400000,
46        "doc_count": 2202,
47        "number_of_unique_customers_per_day": {
48          "value": 55
49        },
50        "daily_revenue": {
51          "value": 45620.46
52        }
53      },
54      {
55        "key_as_string": "12/4/2010 0:0",
56        "key": 1291420800000,
57        "doc_count": 0,
58        "number_of_unique_customers_per_day": {
59          "value": 0
60        },
61        "daily_revenue": {
62          "value": 0
63        }
64      },
65      {
66        "key_as_string": "12/5/2010 0:0",
67        "key": 1291507200000,
68        "doc_count": 2725,
69        "number_of_unique_customers_per_day": {
70          "value": 76
71        },
72        "daily_revenue": {
73          "value": 31383.95
74        }
75      }

```