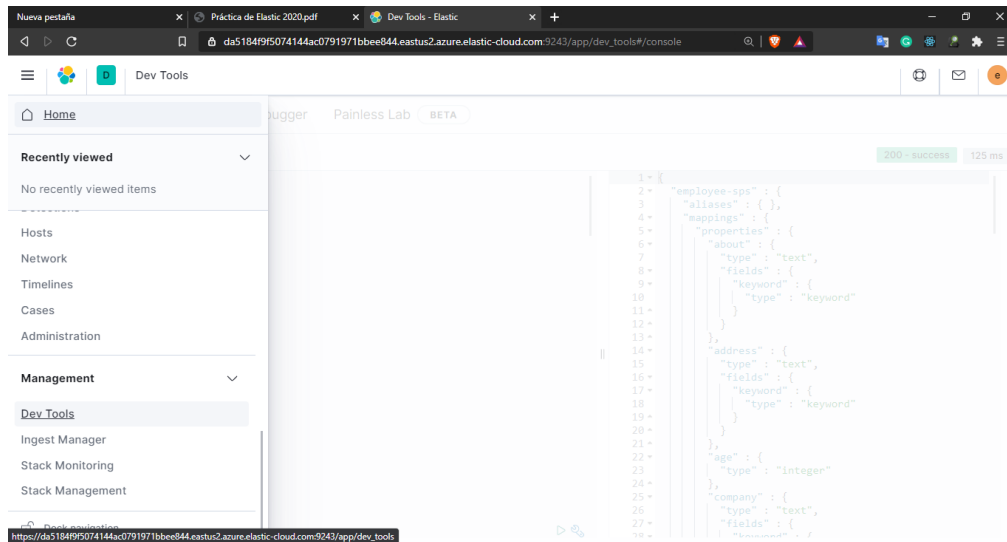


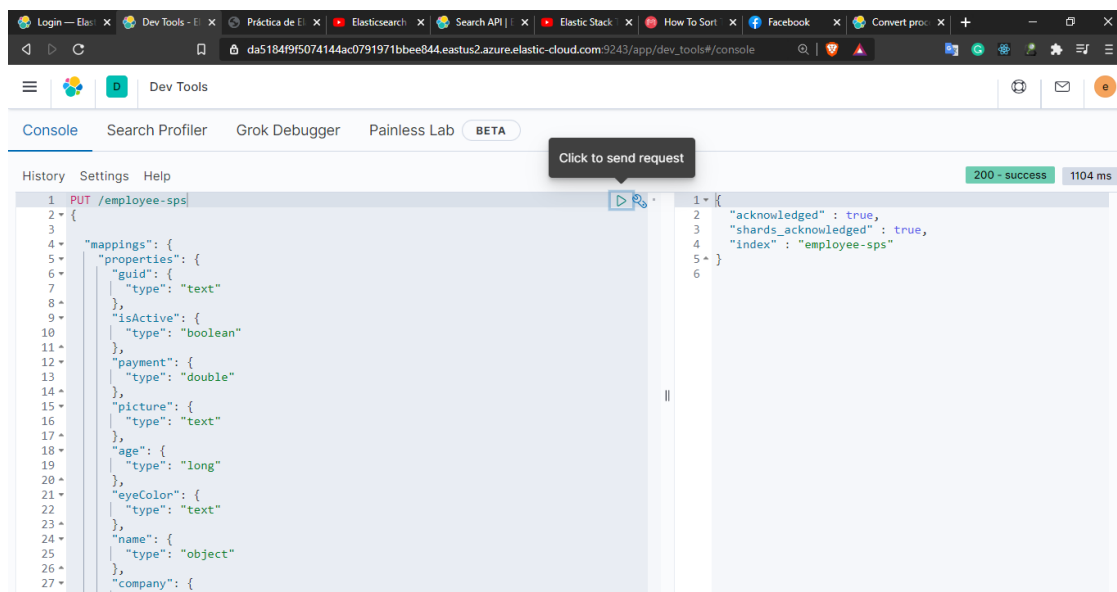
# Practica ElasticSearch

## Desarrollo

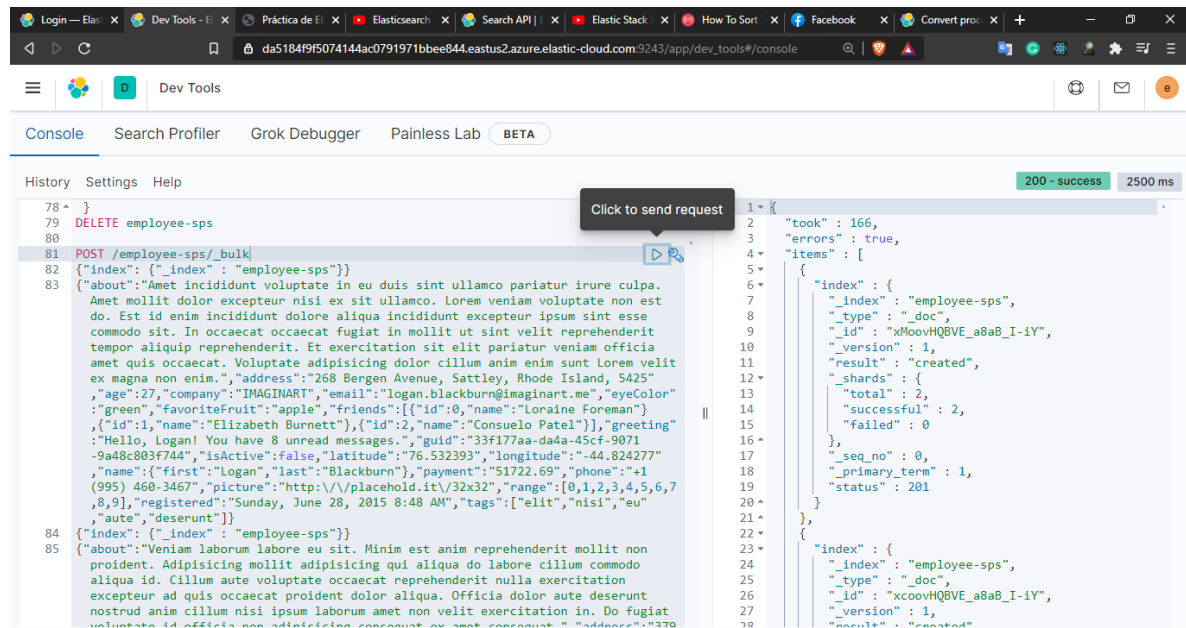
- Una vez creado el proyecto me dirigí a Dev Tools para crear el índice basándome en el archivo JSON



- Una vez ahí tenía que establecer las reglas de cómo va a ser el índice, por lo que era necesario indicar el nombre del campo y que tipo de dato es, una vez hecho corremos el comando PUT /employee-sps para crear el índice.

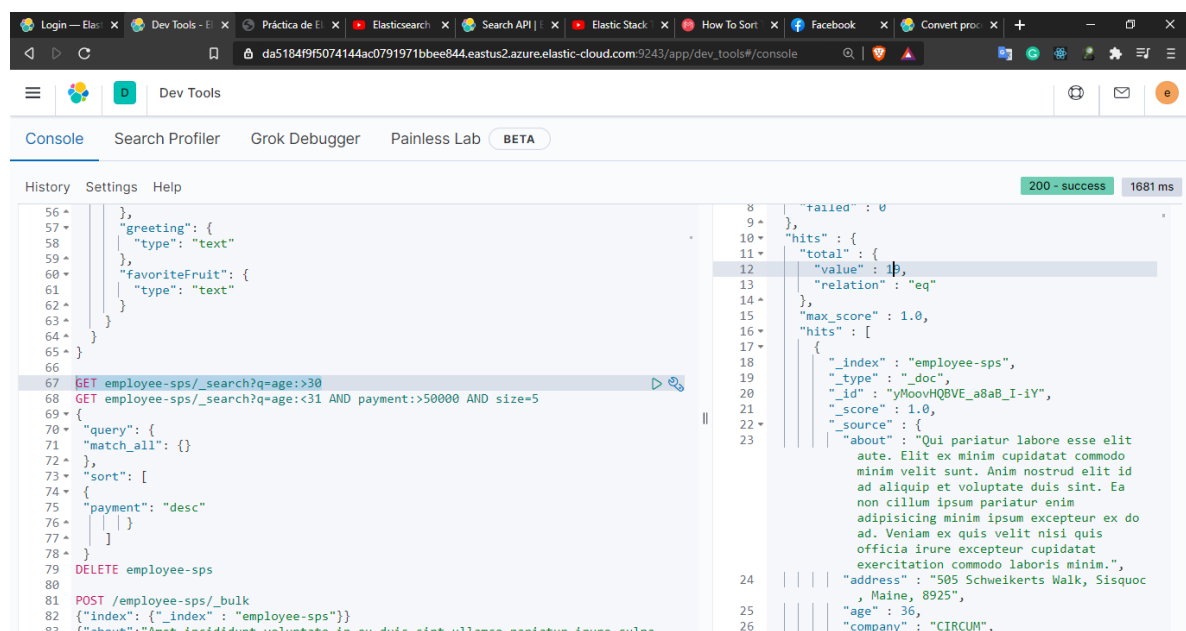


Posteriormente cargue la información del archivo Employee.json para ello tuve que eliminar el campo `"_type": "doc"` de cada uno de los empleados ya que si no me marcaba un error



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78 + }
79 DELETE employee-sps
80
81 POST /employee-sps/_bulk
82 {"index": {"_index": "employee-sps"}}
83 {"about": "Amet incididunt voluptate in eu dui sint ullamco pariatum irure culpa.
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tempor aliquip reprehenderit. Et exercitation sit elit pariatum veniam officia
amet quis occaecat. Voluptate adipisicing dolor cillum anim enim sunt Lorem velit
ex magna non enim.", "address": "268 Bergen Avenue, Sattley, Rhode Island, 5425",
"age": 27, "company": "IMAGINART", "email": "logan.blackburn@imaginart.me", "eyeColor":
"green", "favoriteFruit": "apple", "friends": [{"id": 0, "name": "Loraine Foreman"}],
{"id": 1, "name": "Elizabeth Burnett"}, {"id": 2, "name": "Consuelo Patel"}], "greeting":
"Hello, Logan! You have 8 unread messages.", "guid": "33f177aa-da4a-45cf-9071-
9a48c803f744", "isActive": false, "latitude": "76.532393", "longitude": "-44.824277",
"name": {"first": "Logan", "last": "Blackburn"}, "payment": "51722.69", "phone": "+1
(995) 460-3467", "picture": "http://placeholder.it/32x32", "range": [0, 1, 2, 3, 4, 5, 6,
7, 8, 9], "registered": "Sunday, June 28, 2015 8:48 AM", "tags": ["elit", "nisi", "eu",
"aute", "deserunt"]}
84 {"index": {"_index": "employee-sps"}}
85 {"about": "Veniam laborum labore eu sit. Minim est anim reprehenderit mollit non
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, Maine, 8925",
"age": 36,
"company": "CIRCUM",
"email": "logan.blackburn@imaginart.me",
"eyeColor": "green",
"favoriteFruit": "apple",
"friends": [{"id": 0, "name": "Loraine Foreman"}],
{"id": 1, "name": "Elizabeth Burnett"}, {"id": 2, "name": "Consuelo Patel"}],
"guid": "33f177aa-da4a-45cf-9071-9a48c803f744",
"isActive": false,
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"longitude": "-44.824277",
"name": {"first": "Logan", "last": "Blackburn"},
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"phone": "+1 (995) 460-3467",
"picture": "http://placeholder.it/32x32",
"range": [0, 1, 2, 3, 4, 5, 6, 7, 8, 9],
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- Ahora busque a todos los empleados que superan los 30 años de edad para ello use el comando
- GET employee-sps/\_search?q=age:>30



```
56 + },
57 + "greeting": {
58 +   "type": "text"
59 + },
60 + "favoriteFruit": {
61 +   "type": "text"
62 + }
63 + }
64 + }
65 + }
66 + }
67 GET employee-sps/_search?q=age:>30
68 GET employee-sps/_search?q=age:<31 AND payment:>50000 AND size=5
69 {
70 + "query": {
71 +   "match_all": {}
72 + },
73 + "sort": [
74 +   {
75 +     "payment": "desc"
76 +   }
77 + ]
78 + }
79 DELETE employee-sps
80
81 POST /employee-sps/_bulk
82 {"index": {"_index": "employee-sps"}}
83 {"about": "Amet incididunt voluptate in eu dui sint ullamco pariatum irure culpa.
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ex magna non enim.", "address": "268 Bergen Avenue, Sattley, Rhode Island, 5425",
"age": 27, "company": "IMAGINART", "email": "logan.blackburn@imaginart.me", "eyeColor":
"green", "favoriteFruit": "apple", "friends": [{"id": 0, "name": "Loraine Foreman"}],
{"id": 1, "name": "Elizabeth Burnett"}, {"id": 2, "name": "Consuelo Patel"}], "greeting":
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"name": {"first": "Logan", "last": "Blackburn"}, "payment": "51722.69", "phone": "+1
(995) 460-3467", "picture": "http://placeholder.it/32x32", "range": [0, 1, 2, 3, 4, 5, 6,
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84 {"index": {"_index": "employee-sps"}}
85 {"about": "Veniam laborum labore eu sit. Minim est anim reprehenderit mollit non
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```

- Al realizar la búsqueda tuve 19 resultados

- Después busque a los top 5 empleados con un sueldo mayor de \$50000 y que tengan 30 años o menos, para ello use el comando

GET employee-sps/\_search?q=age:<31 AND payment:>50000 AND size=5

```
{
  "query": {
    "match_all": {}
  },
  "sort": [
    {
      "payment": "desc"
    }
  ]
}
```

- Los ordene de manera descendente mostrando el que tiene mayor sueldo al menor

The screenshot shows a web browser with a REST client interface. The address bar shows the URL: `da5184f9f5074144ac0791971bbee844.eastus2.azure.elastic-cloud.com:9243/app/dev_tools#/console`. The interface includes tabs for "Console", "Search Profiler", "Grok Debugger", and "Painless Lab". The "Console" tab is active, showing a list of requests and responses. The selected request is a GET request to `employee-sps/_search?q=age:<31 AND payment:>50000 AND size=5` with a JSON body. The response is a 200 status code, indicating success, and contains a JSON object with search results. A tooltip "Click to send request" is visible over the "Send" button.

```
1 * {
2   "took" : 2,
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" : 5,
13      "relation" : "eq"
14    },
15    "max_score" : null,
16    "hits" : [
17      {
18        "_index" : "employee-sps",
19        "_type" : "_doc",
20        "_id" : "3coovHQ8VE_a8aB_I-iY",
21        "_score" : null,
22        "_source" : {
23          "about" : "Eiusmod consectetur laboris labore quis cillum nostrud magna mollit exercitation. Occaecat ut excepteur elit irure et est sint voluptate commodo ullamco dolor ullamco consectetur non. Magna exercitation ullamco esse Lorem
```



da5184f9f5074144ac079171bbee844.eastus2.azure.elastic-cloud.com:9243/app/dev\_tools#/console

Dev Tools

Console Search Profiler Grok Debugger Painless Lab BETA

History Settings Help

```
56 ^    },
57 ^    "greeting": {
58 ^      "type": "text"
59 ^    },
60 ^    "favoriteFruit": {
61 ^      "type": "text"
62 ^    }
63 ^  }
64 ^}
65 ^}
66
67 GET employee-sps/_search?q=age:>30
68 GET employee-sps/_search?q=age:<31 AND payment:>50000 AND size=5
69 {
70   "query": {
71     "match_all": {}
72   },
73   "sort": [
74     {
75       "payment": "desc"
76     }
77   ]
78 }
79 DELETE employee-sps
80
81 POST /employee-sps/_bulk
82 {"index":{"_index": "employee-sps"}}
83 /about:"Amet incididunt voluptate in eu dicit elit ut lamesse prolatum faure eules
```

200 - success 2165 ms

```
170 ^
171 ^
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195 ^
```

payment

3 of 5

```
"guid": "d6b381b0-f294-4224-8211-f92dc6bc1606",
"isActive": false,
"latitude": "-55.655587",
"longitude": "-113.896087",
"name": {
  "first": "Madeleine",
  "last": "Oliver"
},
"payment": "64418.94",
"phone": "+1 (926) 444-3117",
"picture": "http://placeholder.it/32x32",
"range": [
  0,
  1,
  2,
  3,
  4,
  5,
  6,
  7,
  8,
  9
]
```

da5184f9f5074144ac079171bbee844.eastus2.azure.elastic-cloud.com:9243/app/dev\_tools#/console

Dev Tools

Console Search Profiler Grok Debugger Painless Lab BETA

History Settings Help

```
56 ^    },
57 ^    "greeting": {
58 ^      "type": "text"
59 ^    },
60 ^    "favoriteFruit": {
61 ^      "type": "text"
62 ^    }
63 ^  }
64 ^}
65 ^}
66
67 GET employee-sps/_search?q=age:>30
68 GET employee-sps/_search?q=age:<31 AND payment:>50000 AND size=5
69 {
70   "query": {
71     "match_all": {}
72   },
73   "sort": [
74     {
75       "payment": "desc"
76     }
77   ]
78 }
79 DELETE employee-sps
80
81 POST /employee-sps/_bulk
82 {"index":{"_index": "employee-sps"}}
83 /about:"Amet incididunt voluptate in eu dicit elit ut lamesse prolatum faure eules
```

200 - success 2165 ms

```
234 ^
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252 ^
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259 ^
```

payment

4 of 5

```
"guid": "2cfeccc7-0e7b-4e99-a1b5-6e04c4ed1fd3",
"isActive": false,
"latitude": "68.417974",
"longitude": "-131.842053",
"name": {
  "first": "Kelsey",
  "last": "Fields"
},
"payment": "59213.35",
"phone": "+1 (961) 493-3149",
"picture": "http://placeholder.it/32x32",
"range": [
  0,
  1,
  2,
  3,
  4,
  5,
  6,
  7,
  8,
  9
]
```

The screenshot shows the Elastic Dev Tools console. On the left, a REST client request is defined with the following details:

- Method: GET
- URI: `employee-sps/_search?q=age:>30`
- Body (JSON):

```
{  "query": {    "match_all": {}  },  "sort": [    {      "payment": "desc"    }  ]}
```

The response on the right shows a successful status (200) and a JSON body containing a list of documents. The first document is highlighted:

```
{  "guid": "3c905fa5-df8d-45b9-800c-c89c5c428191",  "isActive": true,  "latitude": "-76.889388",  "longitude": "-15.656616",  "name": {    "first": "Elvia",    "last": "Baker"  },  "payment": "57144.61",  "phone": "+1 (852) 434-3105",  "picture": "http://placeholder.it/32x32",  "range": [    0,    1,    2,    3,    4,    5,    6,    7,    8,    9  ]}
```

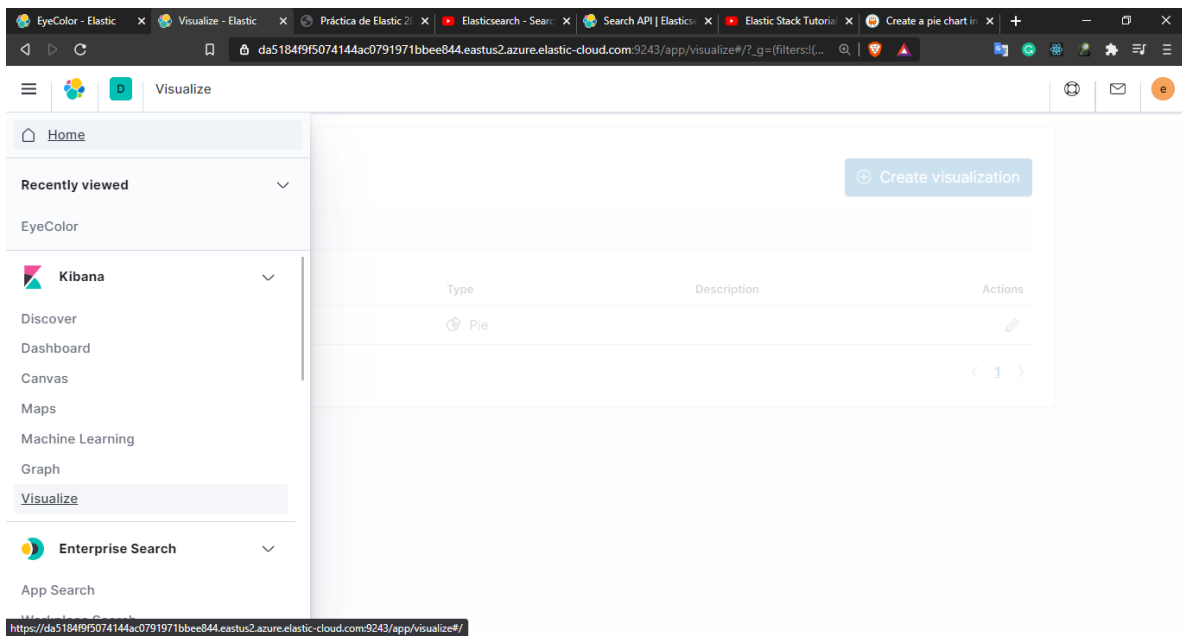
- Posteriormente me dirige a Data/Index Management seleccione el índice que genere anteriormente.

The screenshot shows the Elastic Index Management interface. The left sidebar contains navigation links for Ingest, Data, Alerts and Insights, and Security. The main content area is titled "Index Management" and includes tabs for Indices, Data Streams, Index Templates, and Component Templates. Below the tabs, there is a section for "Update your Elasticsearch indices individually or in bulk." with a "Manage index" button and a search bar. A table lists the indices:

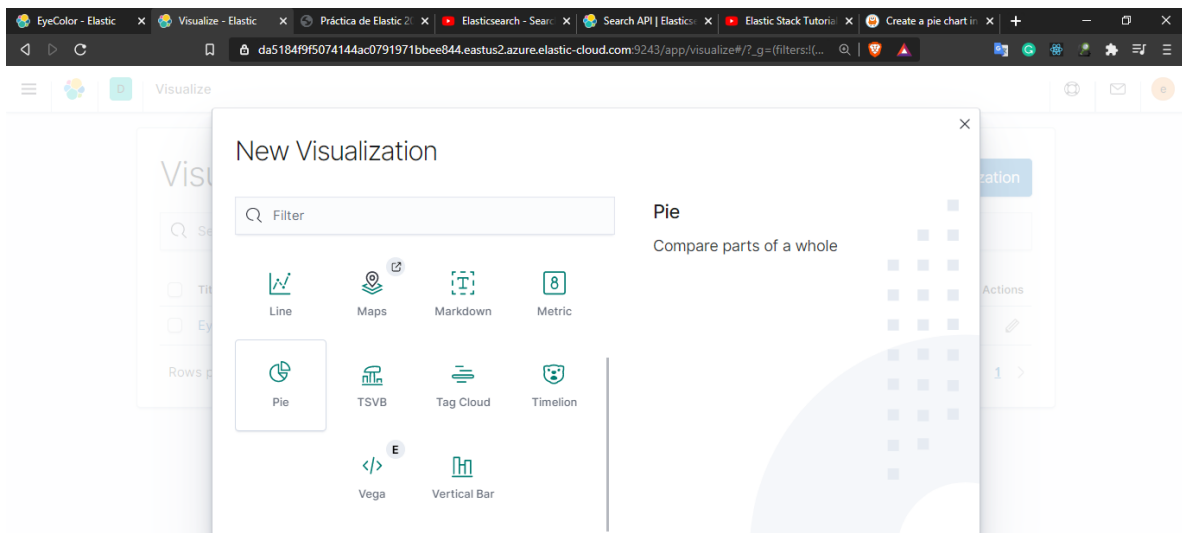
Name	Health	Status	Primaries	Replicas	Docs count	Storage size	Data stream
<input type="checkbox"/> labels	green	open	1	1	1	33.8kb	
<input checked="" type="checkbox"/> employee-sps	green	open	1	1	53	145.2kb	

At the bottom, there is a "Rows per page: 10" dropdown and a pagination control showing "1" of 2 pages.

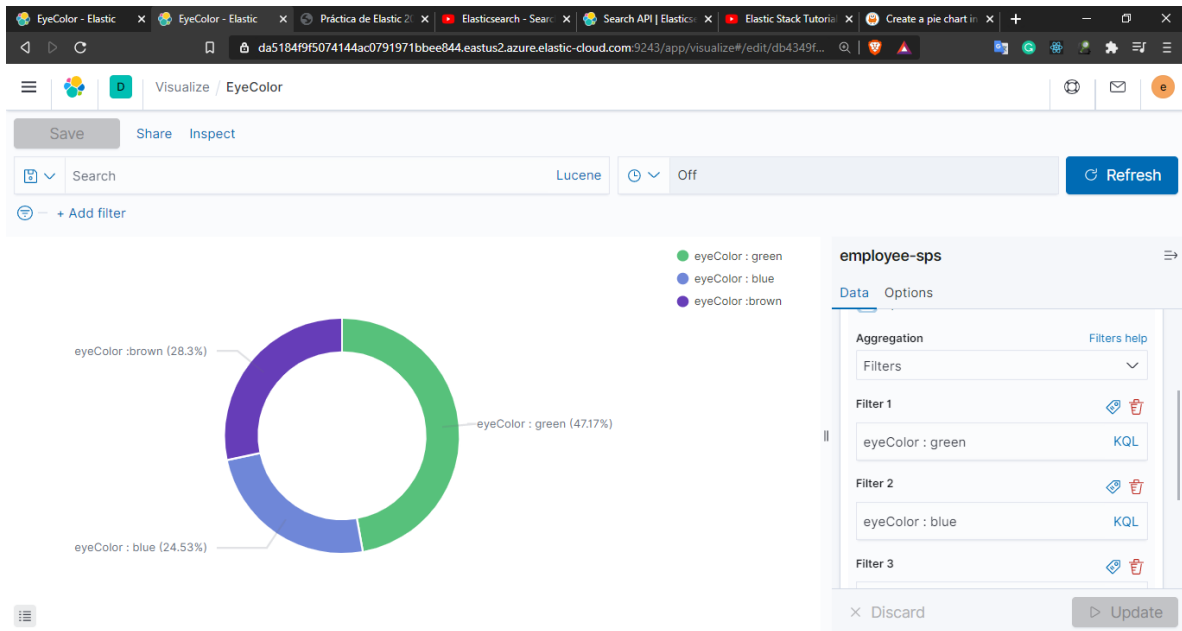
- En Kibana selecciona Visualize y cree una nueva visualización



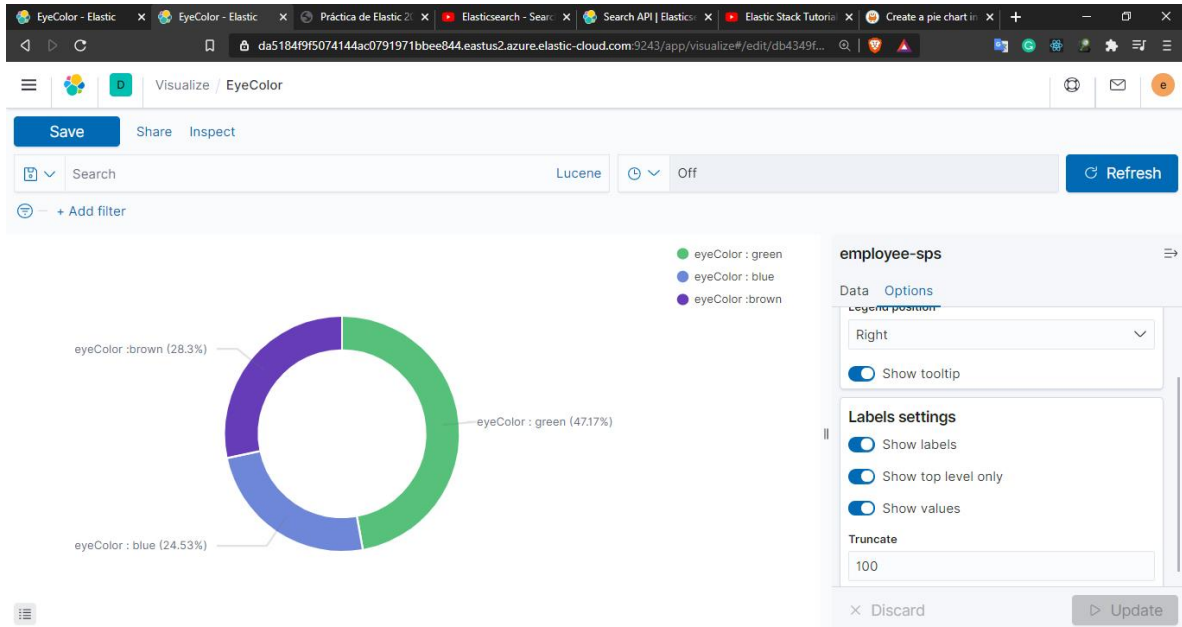
- Para visualizar a los empleados por su color de ojo seleccione a Pie Chart



- En Data seleccione Buckets y di clic en Split slices y posteriormente agregue cada uno de los filtros que necesitaba para crear el grafico

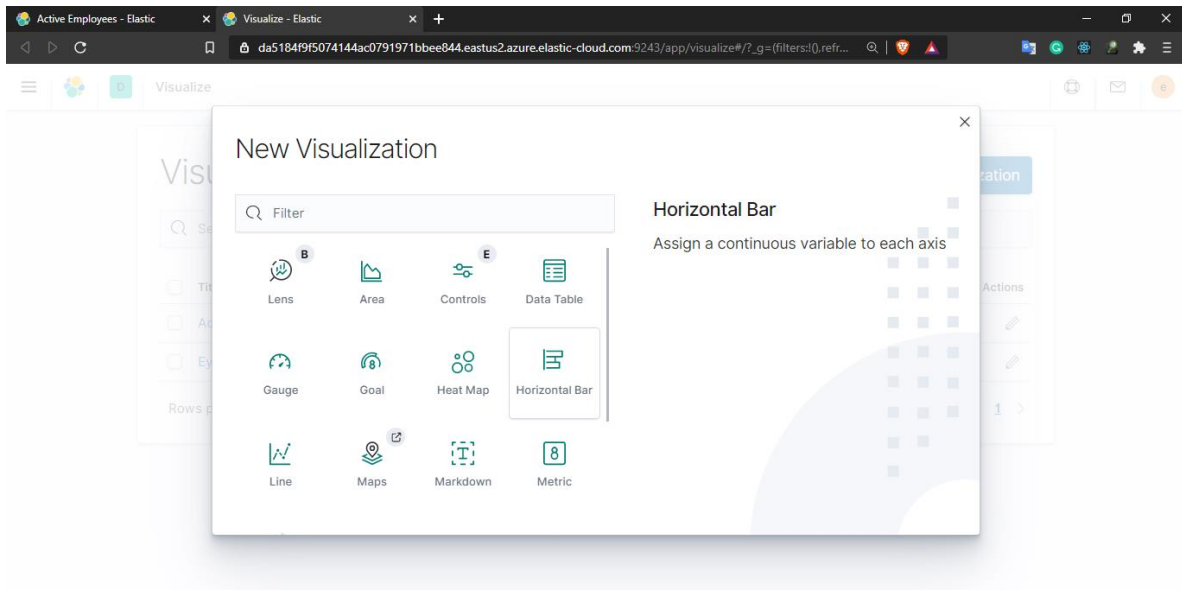


- En options selecciona Show labels para mostrar la información necesaria en el grafico

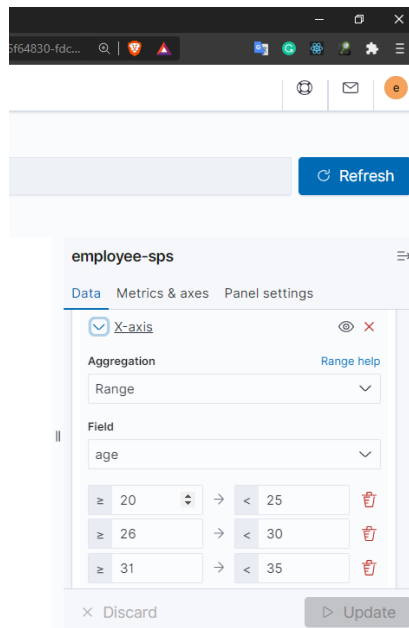




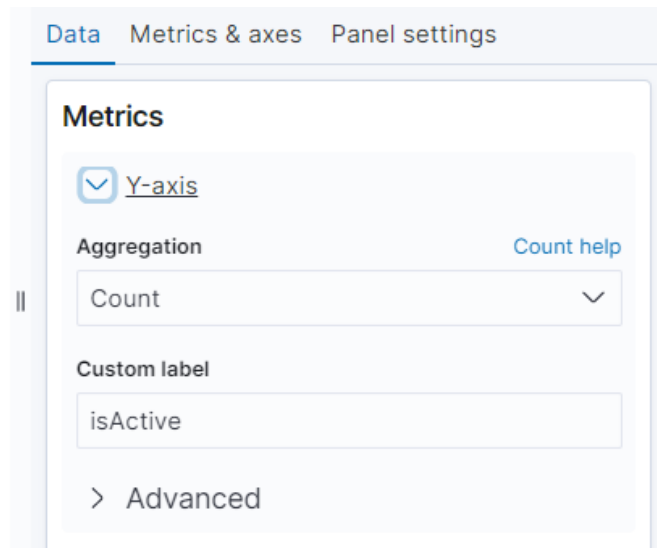
Para visualizar a los empleados activos repetir los mismos pasos para crear una visualización pero ahora seleccione un Bar Chart



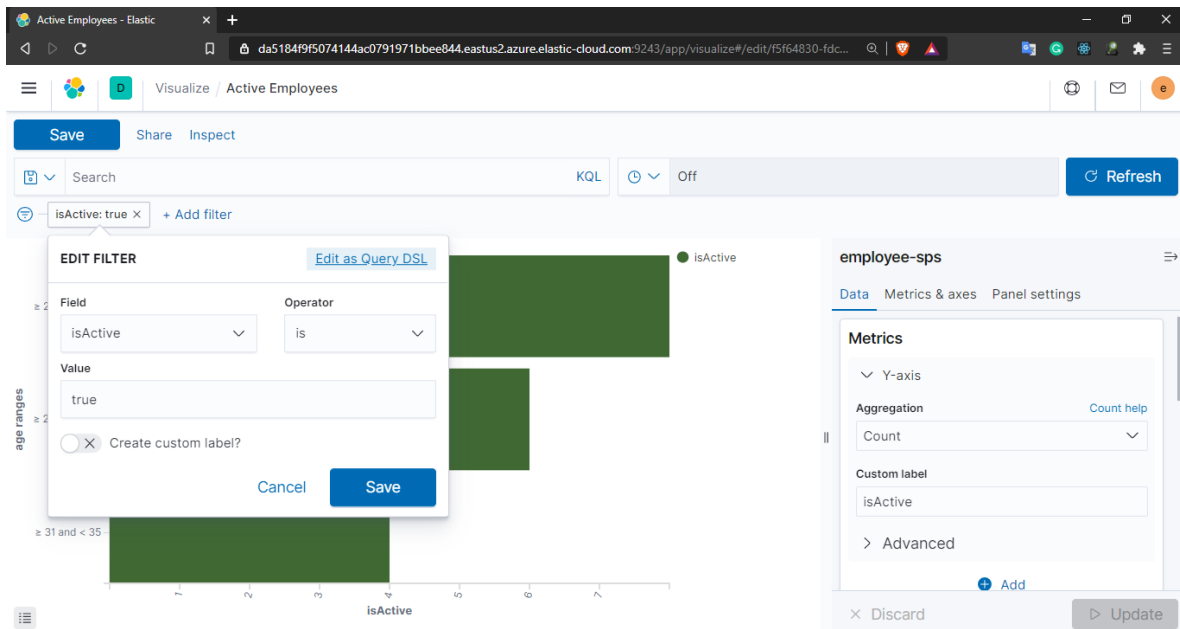
Posteriormente en Data cree los rangos solicitados para visualizar la información.



- En Metric en Y-axis seleccione que contare cuantos empleados activos hay.



- Por ultimo agregue un filtro para que solo contare a los empleados Activos.



- Quedando así la grafica

