Ejercicio 3

Realiza una ingesta de datos en Elasticsearch a partir del fichero

covid-26march2021.json y el comando cURL. Realiza las siguientes operaciones:

* Obtener todos los documentos del índice.

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| Query | Resultado |
| GET covid19/\_search | "hits": {  "total": {  "value": 10,  "relation": "eq"  },  "max\_score": 1,  "hits": [  {  "\_index": "covid19",  "\_id": "NySbXYQB8xsgmnKqAXtN",  "\_score": 1,  "\_source": {  "country": "United States of America",  "date": "2021-03-26",  "cases": 30853032,  "deaths": 561142,  "recovered": 23275268,  "critical": 8610 |

* Obtener el número de casos y el número de muertos de España.

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| Query | Resultado |
| GET covid19/\_search  {  "\_source": ["cases", "deaths"],  "query": {  "match": {  "country": "Spain"  }  }  } | "hits": {  "total": {  "value": 1,  "relation": "eq"  },  "max\_score": 2.2561343,  "hits": [  {  "\_index": "covid19",  "\_id": "PiSbXYQB8xsgmnKqAXtN",  "\_score": 2.2561343,  "\_source": {  "cases": 3255324,  "deaths": 75010 |

* Obtener los nombres de los países con el número de casos mayor de 10 millones.

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| Query | Resultado |
| GET covid19/\_search  {  "\_source": ["country"],  "query": {  "range": {  "cases": {  "gt": 10000000  }  }  }  } | "hits": {  "total": {  "value": 3,  "relation": "eq"  },  "max\_score": 1,  "hits": [  {  "\_index": "covid19",  "\_id": "NySbXYQB8xsgmnKqAXtN",  "\_score": 1,  "\_source": {  "country": "United States of America"  }  },  {  "\_index": "covid19",  "\_id": "OCSbXYQB8xsgmnKqAXtN",  "\_score": 1,  "\_source": {  "country": "Brazil"  }  }, |

* Obtener los datos de los países con casos de muertes entre 80.000 y 100.000.

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| Query | Resultado |
| GET covid19/\_search  {  "query": {  "range": {  "deaths": {  "gt": 80000,  "lt": 100000  }  }  }  } | "hits": {  "total": {  "value": 2,  "relation": "eq"  },  "max\_score": 1,  "hits": [  {  "\_index": "covid19",  "\_id": "OiSbXYQB8xsgmnKqAXtN",  "\_score": 1,  "\_source": {  "country": "Russia",  "date": "2021-03-26",  "cases": 4501859,  "deaths": 97017,  "recovered": 4120161,  "critical": 2300  }  },  {  "\_index": "covid19",  "\_id": "OySbXYQB8xsgmnKqAXtN",  "\_score": 1,  "\_source": {  "country": "France",  "date": "2021-03-26",  "cases": 4465956,  "deaths": 94275,  "recovered": 288062,  "critical": 4766  }  }  ]  }  } |

* De cuántos países disponemos información.

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| Query | Resultado |
| GET covid19/\_count | {  "count": 10,  "\_shards": {  "total": 1,  "successful": 1,  "skipped": 0,  "failed": 0  }  } |

* Cuál es la media de muertes.

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| Query | Resultado |
| GET covid19/\_search  {  "size": 0,  "aggs": {  "Media\_Muertes": {  "avg": {  "field": "deaths"  }  }  }  } | "hits": {  "total": {  "value": 10,  "relation": "eq"  },  "max\_score": null,  "hits": []  },  "aggregations": {  "Media\_Muertes": {  "value": 163689.1  }  }  } |

* Número total de casos.

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| Query | Resultado |
| GET covid19/\_search  {  "size": 0,  "aggs": {  "Total\_casos": {  "sum": {  "field": "cases"  }  }  }  } | "hits": {  "total": {  "value": 10,  "relation": "eq"  },  "max\_score": null,  "hits": []  },  "aggregations": {  "Total\_casos": {  "value": 81108897  }  }  } |

* Cuál ha sido el mayor número de recuperaciones.

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| Query | Resultado |
| GET covid19/\_search  {  "size": 0,  "aggs": {  "Mayo\_casos\_Recuperados": {  "max": {  "field": "recovered"  }  }  }  } | "hits": {  "total": {  "value": 10,  "relation": "eq"  },  "max\_score": null,  "hits": []  },  "aggregations": {  "Mayo\_casos\_Recuperados": {  "value": 23275268  }  }  } |

* Cuál ha sido el menor número de casos críticos.

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| Query | Resultado |
| GET covid19/\_search  {  "size": 0,  "aggs": {  "Menor\_casos\_criticos": {  "min": {  "field": "critical"  }  }  }  } | "hits": {  "total": {  "value": 10,  "relation": "eq"  },  "max\_score": null,  "hits": []  },  "aggregations": {  "Menor\_casos\_criticos": {  "value": 630  }  }  } |

* Mostrar las estadísticas básicas sobre los datos de las muertes.

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| Query | Resultado |
| GET covid19/\_search  {  "size": 0,  "aggs": {  "estadisticas\_basicas": {  "stats": {  "field": "deaths"  }  }  }  } | "hits": {  "total": {  "value": 10,  "relation": "eq"  },  "max\_score": null,  "hits": []  },  "aggregations": {  "estadisticas\_basicas": {  "count": 10,  "min": 30772,  "max": 561142,  "avg": 163689.1,  "sum": 1636891  }  }  } |

* Mostrar las estadísticas “extendidas” sobre los datos de los casos.

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| Query | Resultado |
| GET covid19/\_search  {  "size": 0,  "aggs": {  "estadisticas\_extendidas": {  "extended\_stats": {  "field": "cases"  }  }  }  } | "hits": {  "total": {  "value": 10,  "relation": "eq"  },  "max\_score": null,  "hits": []  },  "aggregations": {  "estadisticas\_extendidas": {  "count": 10,  "min": 2754002,  "max": 30853032,  "avg": 8110889.7,  "sum": 81108897,  "sum\_of\_squares": 1346849359334501,  "variance": 68898404207884.016,  "variance\_population": 68898404207884.016,  "variance\_sampling": 76553782453204.45,  "std\_deviation": 8300506.262143534,  "std\_deviation\_population": 8300506.262143534,  "std\_deviation\_sampling": 8749501.840288077,  "std\_deviation\_bounds": {  "upper": 24711902.224287067,  "lower": -8490122.824287068,  "upper\_population": 24711902.224287067,  "lower\_population": -8490122.824287068,  "upper\_sampling": 25609893.380576152,  "lower\_sampling": -9388113.980576154  }  }  }  } |