

Q1 Script: db.country.find({"GNP": {\$gte: 10000, \$lte: 15000}}, {\_id: 0, Name: 1})

OUTPUT:

```
{ Name: 'Bulgaria' },
{ Name: 'Belarus' },
{ Name: 'Brunei' },
{ Name: 'Côte d'Ivoire' },
{ Name: 'Costa Rica' },
{ Name: 'Iraq' },
{ Name: 'Lithuania' },
{ Name: 'Sudan' },
{ Name: 'El Salvador' },
{ Name: 'Uzbekistan' }
```

Q2 Script: db.country.find({\$where:"/.\*0.\*.test(this.Capital)"}).count()

OUTPUT:

63

Q3 Script: db.country.distinct("Continent").length

OUTPUT:

7

Q4 Script: db.country.aggregate({\$sort: {GNP: -1}}, {\$project: {\_id: 0, Name:1, GNP:1}}, {\$limit: 5})

OUTPUT:

```
{ Name: 'United States', GNP: 8510700 },
{ Name: 'Japan', GNP: 3787042 },
{ Name: 'Germany', GNP: 2133367 },
{ Name: 'France', GNP: 1424285 },
{ Name: 'United Kingdom', GNP: 1378330 }
```

Q5) Script: db.countrylanguage.distinct("Language", {"IsOfficial": 'T', "Percentage": {\$gte: 95.0}})

OUTPUT:

```
'Albanian', 'Arabic',
'Bengali', 'Dhivehi',
'Dutch', 'English',
'Faroese', 'Greek',
'Hungarian', 'Icelandic',
'Italian', 'Japanese',
'Kiribati', 'Kirundi',
'Korean', 'Malagasy',
'Maltese', 'Marshallese',
'Norwegian', 'Polish',
'Portuguese', 'Rwanda',
'Serbo-Croatian', 'Somali',
```

'Spanish', 'Tongan'

Q6) Script: db.city.find({"Name":/Los/i, "Population": {\$gte: 200000}}, {\_id:0, Name: 1})

OUTPUT:

```
{ Name: 'Santiago de los Caballeros' },  
{ Name: 'Santo Domingo de los Colorados' },  
{ Name: 'Ecatepec de Morelos' },  
{ Name: 'San Nicolás de los Garza' },  
{ Name: 'Los Angeles' }
```

Q7) Script: db.country.aggregate({\$group: {\_id: "\$Continent", avg\_val: {\$avg : "\$GNP"}}})

OUTPUT:

```
{ _id: 'Africa', avg_val: 10006.465517241379 },  
{ _id: 'South America', avg_val: 107991 },  
{ _id: 'Oceania', avg_val: 14991.953571428572 },  
{ _id: 'North America', avg_val: 261854.78918918918 },  
{ _id: 'Europe', avg_val: 206497.0652173913 },  
{ _id: 'Asia', avg_val: 150105.72549019608 },  
{ _id: 'Antarctica', avg_val: 0 }
```