1. Pipelines All volcanoes in Japan

[{ $project: { \_id: 0, Country: 1, Volcano\_Name: 1, Volcano\_Type: 1, Last\_Eruption: 1, Lat: 1, Lon: 1, location: { type: 'Point', coordinates: [ '$Lon', '$Lat' ] } }},

{ $match: { Country: 'Japan' }},

{ $out: 'All\_volcanoes\_in\_japan'}]

1. Pipeline All volcanoes where pop within 5KM more than 5000 People

[{ $project: { \_id: 0, Volcano\_Name: 1, Volcano\_Type: 1, Country: 1, Last\_Eruption: 1, Lat: 1, Lon: 1, population\_within\_5km: 1 }},

{ $match: { population\_within\_5km: { $gt: 5000 } }},

{ $out: 'Pipeline\_All\_volcanoes\_where\_pop\_within\_5KM\_more\_than\_5000Pepole'}]

1. Pipeline All volcanoes per country per volcano type within10km more than100000 People

[{ $project: { \_id: 0, Country: 1, Volcano\_Type: 1, population\_within\_10km: 1 }},

{ $match: { population\_within\_10km: { $gt: 100000 } }},

{ $group: { \_id: '$Country', Vol\_type: { $push: '$Volcano\_Type' } }}, { $out: 'Pipeline\_All\_volcanoes\_per\_country\_per\_volcano\_type\_within10km\_more\_than\_100000Pepole\_update'}]

1. Pipeline Volcanoes that erupted BCE

[{ $project: { \_id: 0, Volcano\_Name: 1, elevation\_meters: 1, Last\_Eruption: 1, Location: { $concat: [ '$Country', '-', '$Latitude', '$Longitude' ] } }}, { $match: { Last\_Eruption: { $regex: 'BCE' } }}, { $sort: { elevation\_meters: -1 }}, { $out: 'Pipeline\_Volcanoes\_that\_erupted\_BCE'}]

1. Pipeline volcanoes with the highest and lowest elevation by volcano types

[{ $group: { \_id: '$Volcano\_Type', lowest\_elevation: { $min: '$elevation\_meters' }, Highest\_elevation: { $max: '$elevation\_meters' } }}, { $out: 'Pipeline\_Highest\_Lowest\_Vol'}]