Actividad 3 – Query’s Avanzadas

Ficha: 2559202.

Nombre: .

1. Usando la colección listingsAndReviews de sample\_airbnb, encuentre mediante el uso de agregaciones, cuál es la propiedad con mayor número de servicios ("amenities") de la colección.

use ("sample\_airbnb");

db.listingsAndReviews.aggregate([

   {

     $project: {

       name: 1,

       amenities: 1,

       num\_amenities: { $size: "$amenities" }

     }

   },

   {

     $sort: {

       num\_amenities: -1

     }

   },

   {

     $limit: 1

   }

 ]);

[

  {

*"\_id"*: "27366599",

*"name"*: "Sublime loft with private roof top @ Old Montreal",

*"amenities"*: [

      "TV",

      "Cable TV",

      "Wifi",

      "Air conditioning",

      "Kitchen",

      "Paid parking off premises",

      "Pets allowed",

      "Gym",

      "Breakfast",

      "Elevator",

      "Free street parking",

      "Buzzer/wireless intercom",

      "Heating",

      "Washer",

      "Dryer",

      "Smoke detector",

      "Carbon monoxide detector",

      "First aid kit",

      "Safety card",

      "Fire extinguisher",

      "Essentials",

      "Shampoo",

      "Lock on bedroom door",

      "Hangers",

      "Hair dryer",

      "Iron",

      "Laptop friendly workspace",

      "Private living room",

      "Baby monitor",

      "Outlet covers",

      "Bathtub",

      "Baby bath",

      "Changing table",

      "High chair",

      "Stair gates",

      "Children’s books and toys",

      "Window guards",

      "Table corner guards",

      "Babysitter recommendations",

      "Crib",

      "Room-darkening shades",

      "Children’s dinnerware",

      "Game console",

      "Hot water",

      "Bed linens",

      "Extra pillows and blankets",

      "Ethernet connection",

      "Pocket wifi",

      "Microwave",

      "Coffee maker",

      "Refrigerator",

      "Dishwasher",

      "Dishes and silverware",

      "Cooking basics",

      "Oven",

      "Stove",

      "EV charger",

      "Single level home",

      "BBQ grill",

      "Patio or balcony",

      "Garden or backyard",

      "Luggage dropoff allowed",

      "Long term stays allowed",

      "Cleaning before checkout",

      "Wide doorway",

      "Well-lit path to entrance",

      "Step-free access",

      "Wide doorway",

      "Wide clearance to bed",

      "Step-free access",

      "Wide doorway",

      "Step-free access",

      "Wide entryway",

      "Other",

      "Waterfront",

      "Paid parking on premises"

    ],

*"num\_amenities"*: 76

  }

]

1. Usando la colección listingsAndReviews de sample\_airbnb, encuentre mediante el uso de agregaciones, el número de propiedades que tienen conexión a Internet sea desde Wifi o desde cable (Ethernet). Nota. Revise el campo amenities (“servicios”)

use ("sample\_airbnb");

db.listingsAndReviews.aggregate([

   {

     $match: {

       amenities: {

         $in: ["Wifi", "Ethernet"]

       }

     }

   },

   {

     $count: "total\_propiedades\_con\_internet"

   }

 ])

[

  {

*"* total\_propiedades\_con\_internet *"*: 5303

  }

]

1. Usando la colección listingsAndReviews de sample\_airbnb, encuentre mediante el uso de agregaciones, todas las propiedades que hayan recibido 50 o más comentarios, que la valoración ("review\_score\_rating") sea mayor o igual a 80, que cuenten con conexión a Internet vía cable y que estén ubicadas en Brazil.

use ("sample\_airbnb");

db.listingsAndReviews.aggregate([

   {

     $match: {

       "address.country": "Brazil",

       "review\_scores.review\_scores\_rating": { $gte: 80 },

       "reviews": { $exists: true },

       "amenities": /Ethernet/

     }

   },

   {

     $addFields: {

       "number\_of\_reviews": { $size: { $ifNull: ["$reviews", []] } }

     }

   },

   {

     $match: {

       "number\_of\_reviews": { $gte: 50 }

     }

   },

   {

     $project: {

       "property\_id": 1,

       "name": 1,

       "amenities": 1,

       "review\_scores\_rating": "$review\_scores.review\_scores\_rating",

       "number\_of\_reviews": 1

     }

   }

 ])

[

  {

*"\_id"*: "1063491",

*"name"*: "Charming Apartment,perfect Location",

*"number\_of\_reviews"*: 110,

*"amenities"*: [

      "TV",

      "Cable TV",

      "Wifi",

      "Air conditioning",

      "Kitchen",

      "Elevator",

      "Washer",

      "Dryer",

      "Smoke detector",

      "Carbon monoxide detector",

      "Essentials",

      "Shampoo",

      "Hangers",

      "Hair dryer",

      "Iron",

      "Laptop friendly workspace",

      "Self check-in",

      "Lockbox",

      "Private living room",

      "Private entrance",

      "Room-darkening shades",

      "Hot water",

      "Bed linens",

      "Extra pillows and blankets",

      "Ethernet connection",

      "Microwave",

      "Coffee maker",

      "Refrigerator",

      "Dishwasher",

      "Dishes and silverware",

      "Cooking basics",

      "Stove",

      "Luggage dropoff allowed",

      "Long term stays allowed"

    ],

*"review\_scores\_rating"*: 95

  },

  {

*"\_id"*: "11740322",

*"name"*: "★Cozy doble bedroom ★Nearby Christ the Redeemer★",

*"number\_of\_reviews"*: 76,

*"amenities"*: [

      "TV",

      "Cable TV",

      "Internet",

      "Wifi",

      "Kitchen",

      "Paid parking off premises",

      "Free street parking",

      "Buzzer/wireless intercom",

      "Washer",

      "First aid kit",

      "Essentials",

      "Shampoo",

      "Lock on bedroom door",

      "Hangers",

      "Hair dryer",

      "Iron",

      "Laptop friendly workspace",

      "translation missing: en.hosting\_amenity\_49",

      "translation missing: en.hosting\_amenity\_50",

      "Self check-in",

      "Keypad",

      "Hot water",

      "Bed linens",

      "Extra pillows and blankets",

      "Ethernet connection",

      "Microwave",

      "Coffee maker",

      "Refrigerator",

      "Dishes and silverware",

      "Cooking basics",

      "Oven",

      "Stove",

      "Patio or balcony",

      "Garden or backyard",

      "Luggage dropoff allowed"

    ],

*"review\_scores\_rating"*: 99

  },

  {

*"\_id"*: "14996051",

*"name"*: "Best location near the beach at Posto 9",

*"number\_of\_reviews"*: 116,

*"amenities"*: [

      "TV",

      "Cable TV",

      "Internet",

      "Wifi",

      "Air conditioning",

      "Kitchen",

      "Paid parking off premises",

      "Doorman",

      "Pets live on this property",

      "Dog(s)",

      "Elevator",

      "Buzzer/wireless intercom",

      "Washer",

      "Smoke detector",

      "Carbon monoxide detector",

      "First aid kit",

      "Safety card",

      "Fire extinguisher",

      "Essentials",

      "Shampoo",

      "Lock on bedroom door",

      "24-hour check-in",

      "Hangers",

      "Hair dryer",

      "Iron",

      "Laptop friendly workspace",

      "translation missing: en.hosting\_amenity\_49",

      "translation missing: en.hosting\_amenity\_50",

      "Self check-in",

      "Smart lock",

      "Private living room",

      "Hot water",

      "Bed linens",

      "Extra pillows and blankets",

      "Ethernet connection",

      "Pocket wifi",

      "Microwave",

      "Coffee maker",

      "Refrigerator",

      "Dishes and silverware",

      "Cooking basics",

      "Oven",

      "Stove",

      "Single level home",

      "Beach essentials",

      "Luggage dropoff allowed",

      "Long term stays allowed",

      "Cleaning before checkout",

      "Wide hallway clearance",

      "Step-free access",

      "Wide doorway",

      "Well-lit path to entrance",

      "Step-free access",

      "Wide doorway",

      "Wide clearance to bed",

      "Accessible-height bed",

      "Step-free access",

      "Wide doorway",

      "Accessible-height toilet",

      "Step-free access",

      "Wide entryway"

    ],

*"review\_scores\_rating"*: 98

  },

  {

*"\_id"*: "15126808",

*"name"*: "Room at Copacabana beach! 3 min to beach",

*"number\_of\_reviews"*: 69,

*"amenities"*: [

      "Internet",

      "Wifi",

      "Kitchen",

      "Pets allowed",

      "Doorman",

      "Elevator",

      "Buzzer/wireless intercom",

      "Family/kid friendly",

      "Lock on bedroom door",

      "24-hour check-in",

      "Hangers",

      "Laptop friendly workspace",

      "Hot water",

      "Bed linens",

      "Ethernet connection",

      "Microwave",

      "Coffee maker",

      "Refrigerator",

      "Dishes and silverware",

      "Long term stays allowed",

      "Flat path to front door",

      "Step-free access",

      "Wide clearance to bed",

      "Host greets you"

    ],

*"review\_scores\_rating"*: 89

  },

  {

*"\_id"*: "313223",

*"name"*: "Bedroom & living room  in the best part of Ipanema",

*"number\_of\_reviews"*: 93,

*"amenities"*: [

      "TV",

      "Cable TV",

      "Wifi",

      "Air conditioning",

      "Kitchen",

      "Paid parking off premises",

      "Elevator",

      "Family/kid friendly",

      "Washer",

      "Fire extinguisher",

      "Essentials",

      "Shampoo",

      "Lock on bedroom door",

      "Hangers",

      "Hair dryer",

      "Iron",

      "Laptop friendly workspace",

      "Private living room",

      "High chair",

      "Babysitter recommendations",

      "Room-darkening shades",

      "Hot water",

      "Bed linens",

      "Extra pillows and blankets",

      "Ethernet connection",

      "Pocket wifi",

      "Microwave",

      "Coffee maker",

      "Refrigerator",

      "Dishes and silverware",

      "Cooking basics",

      "Stove",

      "Luggage dropoff allowed",

      "Long term stays allowed",

      "Well-lit path to entrance",

      "Step-free access",

      "Wide doorway",

      "Accessible-height bed",

      "Step-free access",

      "Accessible-height toilet",

      "Host greets you",

      "Paid parking on premises"

    ],

*"review\_scores\_rating"*: 95

  },

  {

*"\_id"*: "880678",

*"name"*: "Comfort and Safety in Ipanema!",

*"number\_of\_reviews"*: 149,

*"amenities"*: [

      "TV",

      "Cable TV",

      "Wifi",

      "Air conditioning",

      "Kitchen",

      "Paid parking off premises",

      "Pets allowed",

      "Elevator",

      "Free street parking",

      "Family/kid friendly",

      "Washer",

      "Dryer",

      "Smoke detector",

      "Carbon monoxide detector",

      "Fire extinguisher",

      "Essentials",

      "Shampoo",

      "Lock on bedroom door",

      "Hangers",

      "Hair dryer",

      "Iron",

      "Laptop friendly workspace",

      "Self check-in",

      "Building staff",

      "Crib",

      "Pack ’n Play/travel crib",

      "Room-darkening shades",

      "Hot water",

      "Bed linens",

      "Extra pillows and blankets",

      "Ethernet connection",

      "Pocket wifi",

      "Microwave",

      "Coffee maker",

      "Refrigerator",

      "Dishes and silverware",

      "Cooking basics",

      "Oven",

      "Stove",

      "Well-lit path to entrance",

      "Handheld shower head"

    ],

*"review\_scores\_rating"*: 97

  }

]

1. Usando la colección listingsAndReviews de sample\_airbnb, muestre el costo promedio de una habitación en cada país para las propiedades de tipo casa.

db.listingsAndReviews.aggregate([

   {

     $match: {

       "room\_type": "Entire home/apt"

     }

   },

   {

     $group: {

       \_id: "$address.country",

       avg\_price: { $avg: "$price" }

     }

   },

   {

     $project: {

       \_id: 0,

       country: "$\_id",

       avg\_price: { $round: [ "$avg\_price", 2 ] }

     }

   }

 ])

[

  {

*"country"*: "Brazil",

*"avg\_price"*: {

*"$numberDecimal"*: "630.49"

    }

  },

  {

*"country"*: "United States",

*"avg\_price"*: {

*"$numberDecimal"*: "225.33"

    }

  },

  {

*"country"*: "Australia",

*"avg\_price"*: {

*"$numberDecimal"*: "259.74"

    }

  },

  {

*"country"*: "Spain",

*"avg\_price"*: {

*"$numberDecimal"*: "149.64"

    }

  },

  {

*"country"*: "Hong Kong",

*"avg\_price"*: {

*"$numberDecimal"*: "945.71"

    }

  },

  {

*"country"*: "Canada",

*"avg\_price"*: {

*"$numberDecimal"*: "115.64"

    }

  },

  {

*"country"*: "Turkey",

*"avg\_price"*: {

*"$numberDecimal"*: "392.81"

    }

  },

  {

*"country"*: "China",

*"avg\_price"*: {

*"$numberDecimal"*: "452.07"

    }

  },

  {

*"country"*: "Portugal",

*"avg\_price"*: {

*"$numberDecimal"*: "76.06"

    }

  }

]

1. Utilizando la base datos de sample\_restaurants, construir un tablero que nos permita mostrar:

* ¿Cuántos restaurantes hay en total?
* ¿Cuál es el distrito que cuenta con el mayor número de restaurantes?
* ¿Cuántos restaurantes hay por cada tipo de cocina?
* ¿Cuántos restaurantes hay por cada código postal?

Nota: El tablero debe contar como mínimo, con un digrama de pastel, uno de barras, un número, un mapa y dos filtros.