



POLITECNICO
MILANO 1863

MongoDB - Exercise Session

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MongoDB - Dataset

```
_id: "10006546"
listing_url: "https://www.airbnb.com/rooms/10006546"
name: "Ribeira Charming Duplex"
summary: "Fantastic duplex apartment with three bedrooms, located in the histori..."
space: "Privileged views of the Douro River and Ribeira square, our apartment ..."
description: "Fantastic duplex apartment with three bedrooms, located in the histori..."
neighborhood_overview: "In the neighborhood of the river, you can find several restaurants as
notes: "Lose yourself in the narrow streets and staircases zone, have lunch in..."
transit: "Transport: • Metro station and S. Bento railway 5min; • Bus stop a 50 ..."
access: "We are always available to help guests. The house is fully available t..."
interaction: "Cot - 10 € / night Dog - € 7,5 / night"
house_rules: "Make the house your home..."
property_type: "House"
room_type: "Entire home/apt"
bed_type: "Real Bed"
minimum_nights: "2"
maximum_nights: "30"
cancellation_policy: "moderate"
last_scraped: 2019-02-16T05:00:00.000+00:00
calendar_last_scraped: 2019-02-16T05:00:00.000+00:00
first_review: 2016-01-03T05:00:00.000+00:00
last_review: 2019-01-20T05:00:00.000+00:00
accommodates: 8
bedrooms: 3
```

```
beds: 5
number_of_reviews: 51
bathrooms: 1.0
amenities: Array
  0: "TV"
  1: "Cable TV"
  2: "Wifi"

price: 80.00
security_deposit: 200.00
cleaning_fee: 35.00
extra_people: 15.00
guests_included: 6
images: Object
  thumbnail_url: ""
  medium_url: ""
  picture_url: "https://a0.muscache.com/im/pictures/e83e702f-ef49-40fb-8fa0-6512d7e26e..."
  xl_picture_url: ""
```

MongoDB - Dataset

```

  ✓ host: Object
    host_id: "51399391"
    host_url: "https://www.airbnb.com/users/show/51399391"
    host_name: "Ana&Gonçalo"
    host_location: "Porto, Porto District, Portugal"
    host_about: "Gostamos de passear, de viajar, de conhecer pessoas e locais novos, go..."
    host_response_time: "within an hour"
    host_thumbnail_url: "https://a0.muscache.com/im/pictures/fab79f25-2e10-4f0f-9711-663cb69dc7..."
    host_picture_url: "https://a0.muscache.com/im/pictures/fab79f25-2e10-4f0f-9711-663cb69dc7..."
    host_neighbourhood: ""
    host_response_rate: 100
    host_is_superhost: false
    host_has_profile_pic: true
    host_identity_verified: true
    host_listings_count: 3
    host_total_listings_count: 3
  ✓ host_verifications: Array
    0: "email"
    1: "phone"
    ✓ address: Object
      street: "Porto, Porto, Portugal"
      suburb: ""
      government_area: "Cedofeita, Ildefonso, Sé, Miragaia, Nicolau, Vitória"
      market: "Porto"
      country: "Portugal"
      country_code: "PT"
    ✓ location: Object
      type: "Point"
      ✓ coordinates: Array
        0: -8.61308
        1: 41.1413
      is_location_exact: false
    ✓ availability: Object
      availability_30: 28
      availability_60: 47
      availability_90: 74
      availability_365: 239
```

MongoDB - Dataset

```

  ✓ review_scores: Object
    review_scores_accuracy: 9
    review_scores_cleanliness: 9
    review_scores_checkin: 10
    review_scores_communication: 10
    review_scores_location: 10
    review_scores_value: 9
    review_scores_rating: 89

  ✓ reviews: Array
    > 0: Object
    ✓ 1: Object
      _id: "62413197"
      date: 2016-02-14T05:00:00.000+00:00
      listing_id: "10006546"
      reviewer_id: "40031996"
      reviewer_name: "Théo"
      comments: "We are french's students, we traveled some days in Porto, this space w..."
    > 2: Object
```

MongoDB - Exercise Session

Write one or more queries to return a single housing, and each single one of their attributes that are sub-documents or array. Inspect their content to understand their structure.

MongoDB - Exercise Session

Write a query to return all the housings whose minimum nights is equal to 2.

MongoDB - Exercise Session

Write a query to return the number of housings whose number of reviews is greater than 10.

MongoDB - Exercise Session

Write a query to return the top 10 housings based on their number of bedrooms.

MongoDB - Exercise Session

Write a query to return the housings whose host response rate is greater than 90.

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Write a query to return the name of the hosts whose housings includes a TV and Iron.

MongoDB - Exercise Session

Write a query to return the name of the hosts whose housings includes a TV or Iron.

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Write a query to count the number of housings based on their price.

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Write a query to compute the total number of bedrooms available across all housings.

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Write a query to compute the total number of housings based on their cancellation policy, whose accommodates is greater than 6 and whose host has a profile picture.

MongoDB - Exercise Session

Write a query to compute the total number of housings for each amenity.

MongoDB - Exercise Session

Write a query to compute the total number of housings for each amenity, returning only the amenities whose count is greater than 15.

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Write a query to compute the average price and the average cleaning fees of the housings based on their number of bedrooms and bathrooms, returning only those whose average price is greater than 60 and average cleaning fees is greater than 40.

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Write a query to return the housings for which at least one review with listing id 10006546 and reviewer id 11263097 was written.

MongoDB - Exercise Session

Write a query to return the housings for which at least one review with listing id 10006546 and one reviewer name Bridget were written.

MongoDB - Exercise Session

For each country, compute the total number of unique hosts.

ANY
Questions?