

Best Cuisines

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- Worldwide cuisines: Spanish, Mexican, Italian, Japanese...
- Do we actually need to visit every single country to try each cuisine?
- Which cities have more Italian restaurants?
- Which are the most popular cuisines in Tokyo?





Cities of New York, Tokyo, Hong Kong, Sydney, Barcelona, Paris, Moscow, Buenos Aires and Mexico DF



Data sources

- **Foursquare API:** *explore* endpoint: returns the restaurants in a city for a specific type of cuisine.
- **Types of cuisine:** extracted from the Foursquare API documentation *categoryId* list: *Spanish, French, Italian, Chinese, Japanese, Indian...* (65 in total)



FOURSQUARE

Steps

1. Reading Foursquare API documentation
2. Test the *explore* endpoint with Postman
3. Definition in the notebook of:
 1. List of cities to be explored
 2. *CategoryId* for each kind of international cuisine
 3. Local cuisine for each explored city
4. Get from the API the number of restaurants of each cuisine on each city → store it in a *DataFrame*

Steps

5. Transformation of the DataFrame:

1. One-hot encoding
2. Grouping by city
3. Normalization

| City | Afghan | African | American | Argentinian | Australian | Austrian | Bangladeshi | Belarusian | Belgian | Bosnian | Croatian | Danish | Dutch | English | Finnish | French | Georgian | Greek | Hungarian | Icelandic | Indonesian | Irish | Italian | Jamaican | Korean | Lithuanian | Macedonian | Malaysian | Mongolian | Norwegian | Polish | Portuguese | Romanian | Serbian | Slovenian | Somali | Spanish | Turkish | Vietnamese | |
|-------------------------|----------|----------|-----------|-------------|------------|----------|-------------|------------|----------|----------|----------|----------|----------|----------|-----------|----------|----------|----------|-----------|-----------|------------|-------|---------|----------|--------|------------|------------|-----------|-----------|-----------|--------|------------|----------|---------|-----------|--------|---------|---------|------------|-----|
| Barcelona, Spain | 0.271444 | 0.705755 | 5.463170 | 4.125650 | 0.542888 | 0.108578 | 0.000000 | 0.000000 | 0.814332 | 0.000000 | ... | 0.380022 | 0.271444 | 0.000000 | 1.248643 | 0.108578 | 1.845620 | 0.054289 | 0.760043 | 1.031468 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Buenos Aires, Argentina | 0.751174 | 0.409484 | 0.169014 | 21.690141 | 0.563380 | 0.167793 | 0.000000 | 0.000000 | 0.751174 | 0.000000 | ... | 0.281690 | 0.000000 | 0.000000 | 0.751174 | 0.093897 | 0.657277 | 0.000000 | 0.751174 | 0.657277 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Hong Kong | 0.239808 | 0.299760 | 0.000000 | 0.239808 | 1.618705 | 0.000000 | 0.000000 | 0.000000 | 0.779376 | 0.000000 | ... | 0.299760 | 0.059952 | 0.000000 | 13.189448 | 0.299760 | 1.255993 | 0.000000 | 0.000000 | 8.573141 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Mexico DF | 0.877199 | 0.279200 | 10.981882 | 6.661181 | 0.282666 | 0.791088 | 0.000000 | 0.000000 | 0.328733 | 0.046533 | ... | 0.465333 | 0.000000 | 0.000000 | 1.488085 | 0.418799 | 0.232666 | 0.139600 | 0.611888 | 0.465333 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Moscow, Russia | 0.326797 | 0.272331 | 2.135076 | 0.217855 | 0.217855 | 0.000000 | 0.000000 | 0.217855 | 1.470588 | 0.000000 | ... | 0.326797 | 0.000000 | 0.43573 | 2.069717 | 0.000000 | 3.267974 | 2.287582 | 0.000000 | 6.644880 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| New York, USA | 0.149937 | 1.400037 | 7.205525 | 0.373343 | 1.194099 | 0.288675 | 0.018667 | 0.000000 | 1.098712 | 0.018667 | ... | 1.886384 | 0.037334 | 0.000000 | 5.208139 | 0.448012 | 1.717379 | 0.336009 | 0.317342 | 2.949412 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Paris, France | 0.179533 | 1.795332 | 6.247756 | 0.826883 | 0.688600 | 0.035907 | 0.000000 | 0.000000 | 1.435266 | 0.000000 | ... | 0.251346 | 0.143627 | 0.000000 | 8.150603 | 0.251346 | 1.874665 | 0.071818 | 0.107720 | 5.350090 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Sydney, Australia | 0.645161 | 0.430106 | 1.840452 | 0.172043 | 8.256065 | 0.172043 | 0.172043 | 0.000000 | 0.602151 | 0.043011 | ... | 0.258065 | 0.086022 | 0.000000 | 0.000000 | 0.043011 | 2.623656 | 0.000000 | 0.000000 | 7.526882 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Tokyo, Japan | 0.391543 | 0.443248 | 7.517619 | 0.156617 | 1.020217 | 0.130514 | 0.104411 | 0.026103 | 0.939702 | 0.000000 | ... | 0.261028 | 0.000000 | 0.000000 | 7.204085 | 0.104411 | 1.850302 | 0.104411 | 0.000000 | 3.706604 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |

| | City | Cuisine | Number of restaurants |
|-----|---------------|------------|-----------------------|
| 0 | New York, USA | Afghan | 8 |
| 1 | New York, USA | African | 75 |
| 2 | New York, USA | American | 386 |
| 3 | New York, USA | Burmese | 9 |
| 4 | New York, USA | Cambodian | 9 |
| ... | ... | ... | ... |
| 572 | Mexico DF | Spanish | 154 |
| 573 | Mexico DF | Sri Lankan | 4 |
| 574 | Mexico DF | Swiss | 10 |
| 575 | Mexico DF | Turkish | 5 |
| 576 | Mexico DF | Ukrainian | 3 |

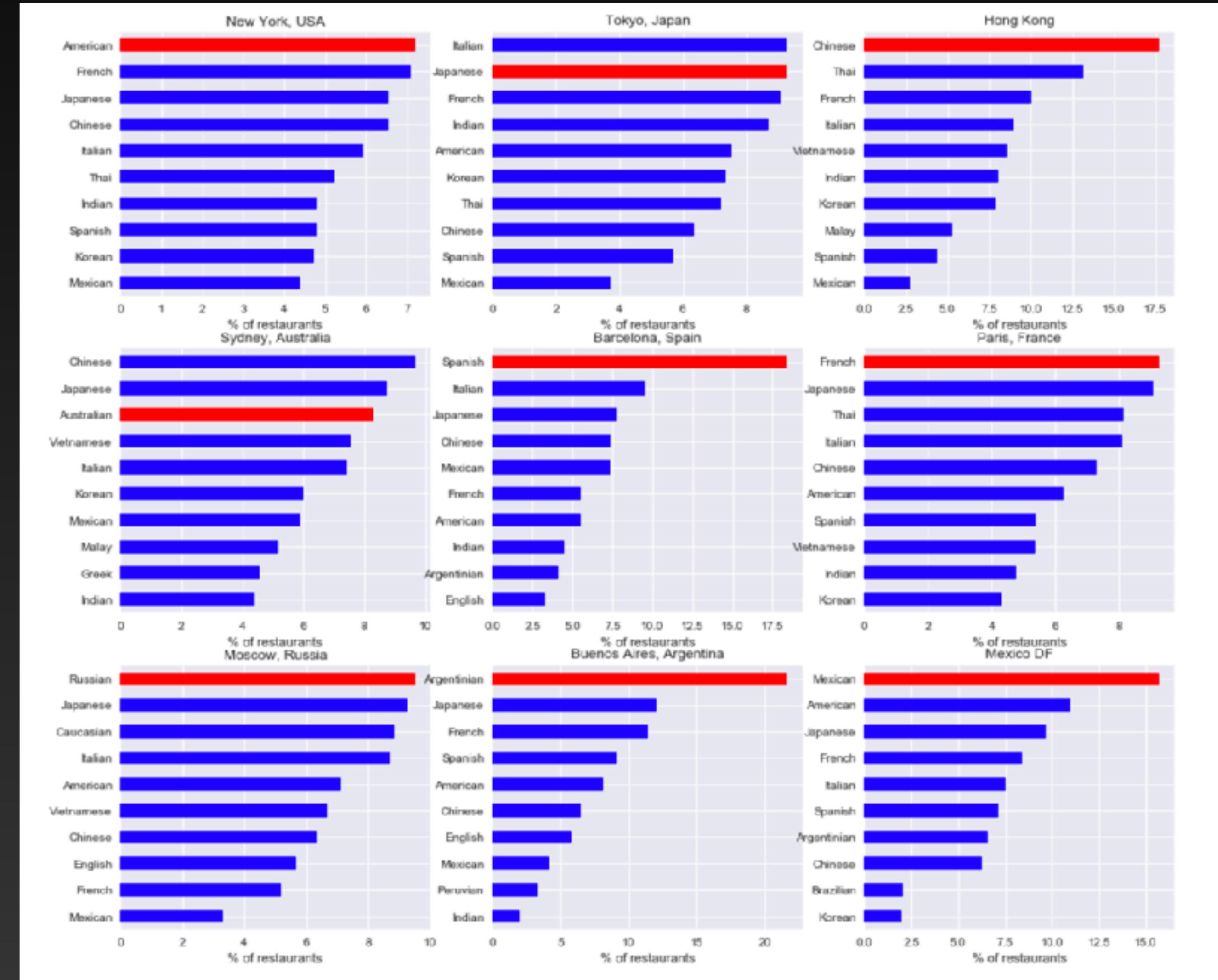
Insights

- The top 10 cuisines for each city
- The top cities for each cuisine
- Popularity of local cuisine on each city
- Most popular cuisines in the world



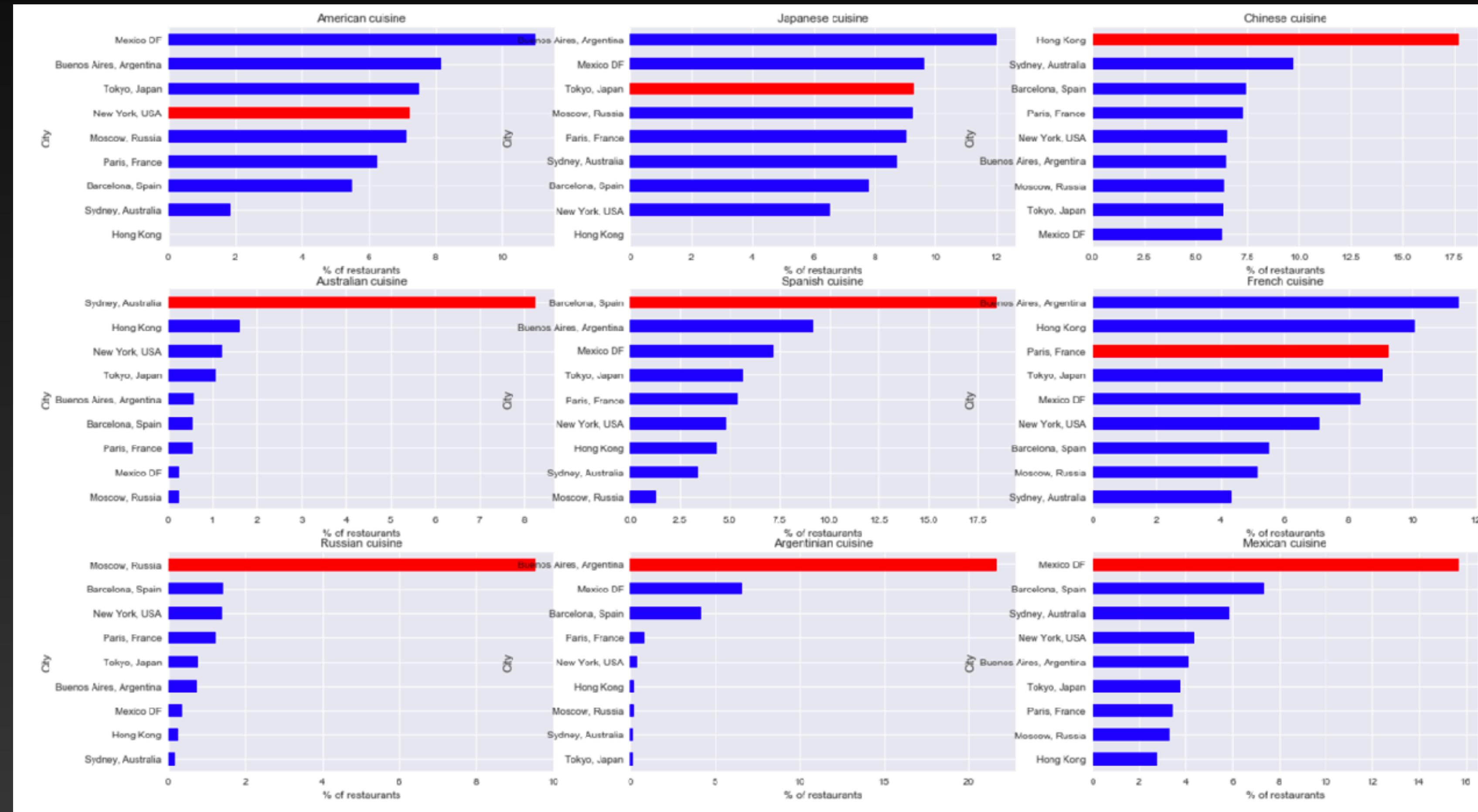
Insights

Top 10 cuisines for each city



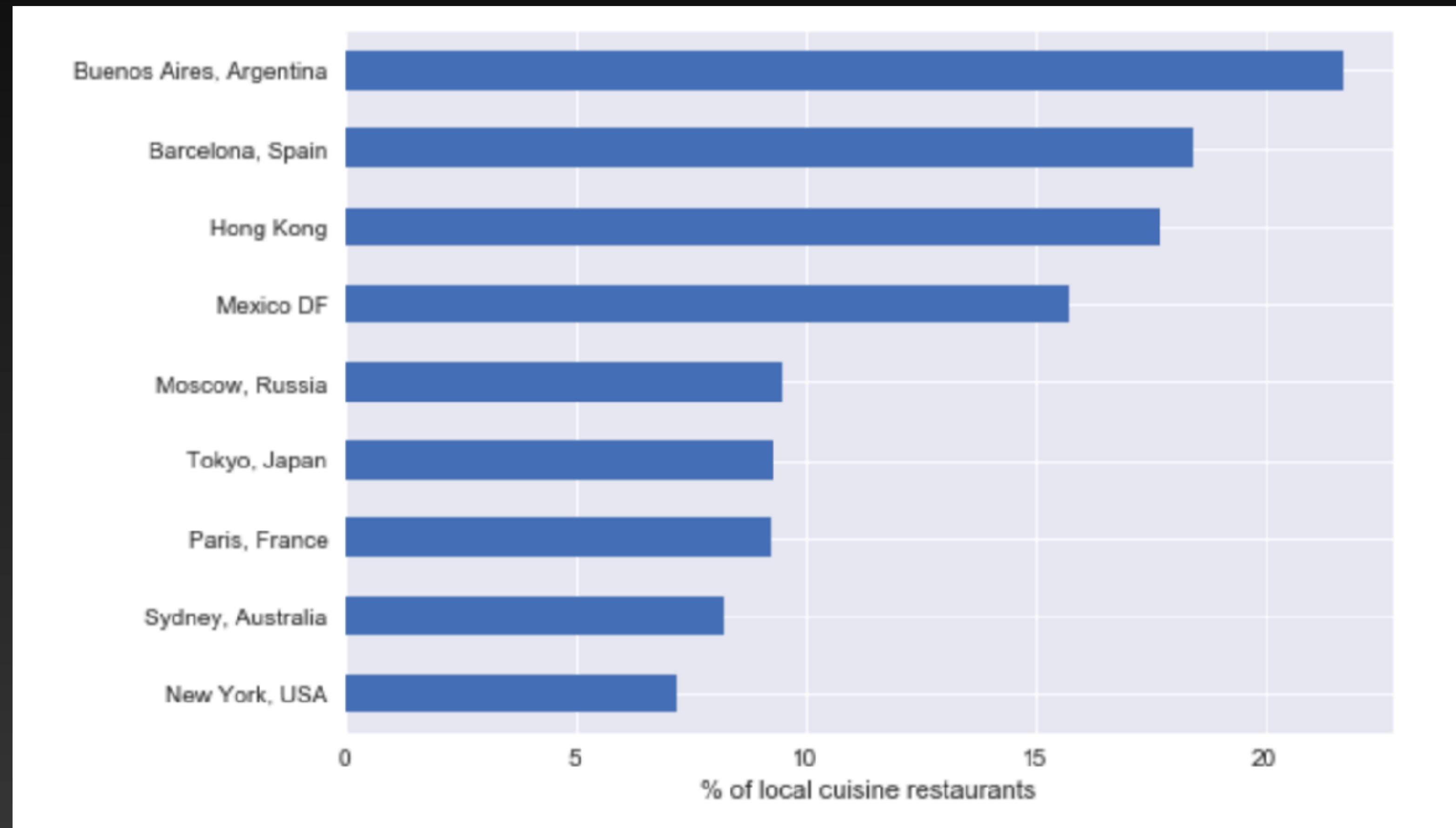
Insights

Top cities for each cuisine



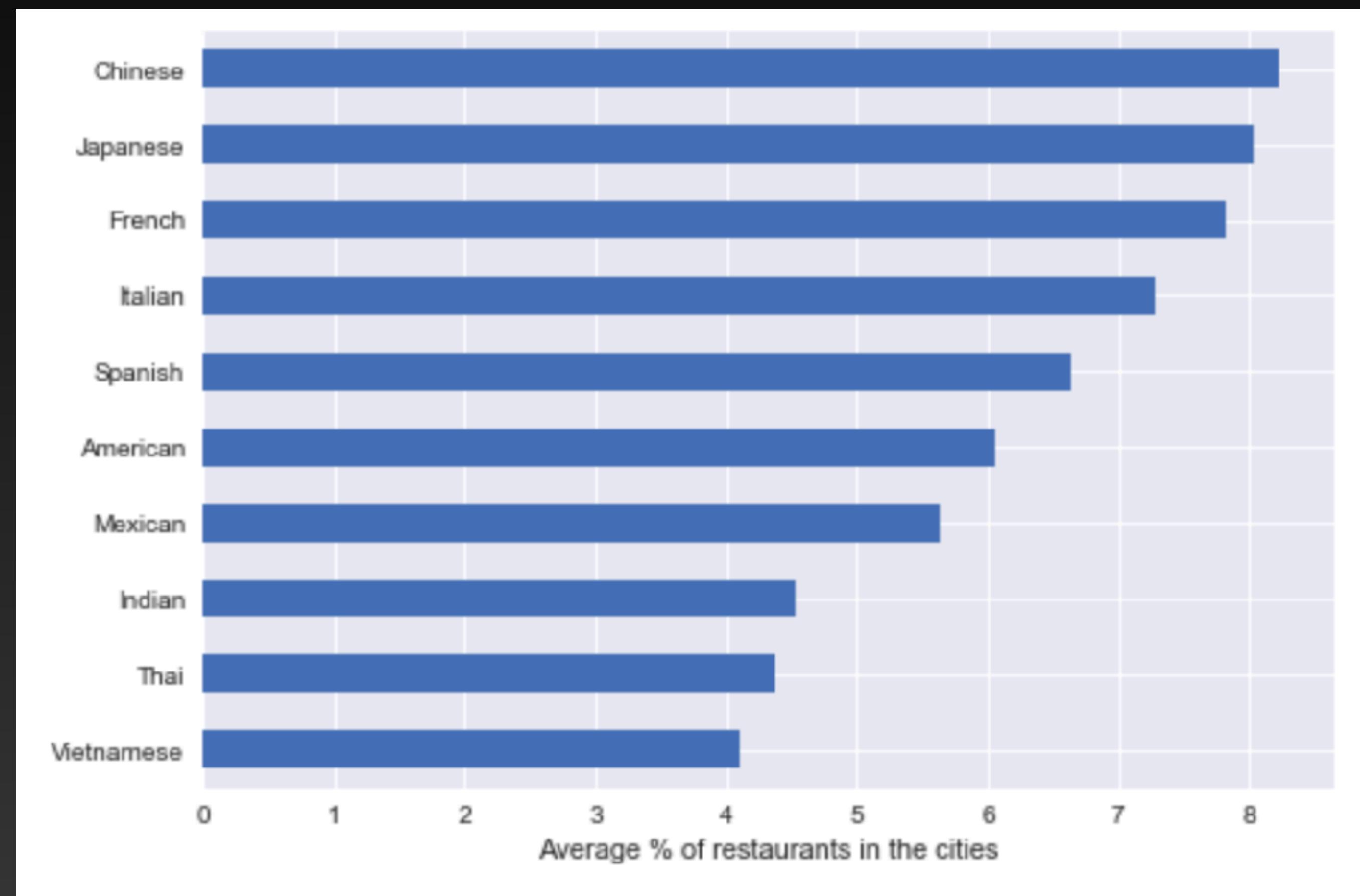
Insights

Popularity of local cuisine on each city



Insights

Most popular cuisines in the world



Future recommendations

- Adding **new cities**:
 - From countries where cuisines are popular worldwide: Italy, Turkey, Vietnam, Thailand...
 - From countries already explored, like Spain or Japan, in order to have a better sample of the country
- Get the **average rating** from the restaurants, in order to make the insights based in quality, rather than just in quantity.