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Open Spanish Restaurant in Barcelona, Spain

1- Introduction

1- I want to start a new Spanish Restaurant in Barcelona, Spain.
2- However, where location I put it because it will be profitable?
3- Which Neighbourshood are better for my objective question?

2- Problems to start a new Spanish Restaurant in Barcelona, Spain

1- Barcelona is important turistic city in Spain. There are too many restaurants and pubs.

2- Cusine culture is topic in Barcelona. There are more than 7400 restaurants and bars.

3- Turism'll eat in their hotels probably.

3 – Target public.

1- Turism wants to taste tipic catalan and spanich food with since smart vision.
2- Age people between 30-50 years who love food experience and to discover news and locals products.
3- This target may be local people who want same experience a good price.
4- My clients are interesting in food ecological products, natural tractaments and smart calid descoration.

4– Data origins

- From geopy which convert an address into latitude and longitude values.
- From FourSquare API
- From Wikipedia: https://en.wikipedia.org/wiki/Category:Neighbourhoods_of_Barcelona
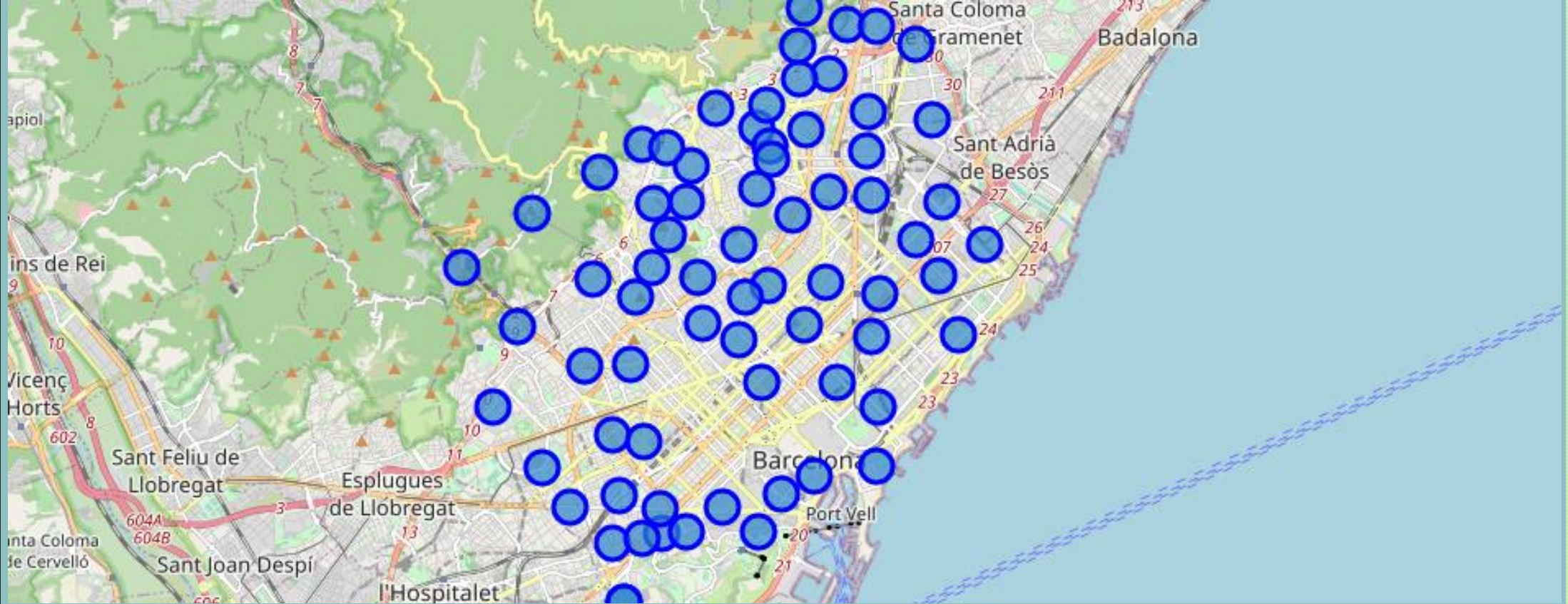
5- Resolve it

- 1- There are 75 Neighbourhood:

```
[ ]  bcn_raw.shape

     (75, 1)

[ ]  bcn_raw
```

	Neighbourhood
0	El Baix Guinardó
1	La Barceloneta, Barcelona
2	Baró de Viver
3	El Besòs i el Maresme
4	Bon Pastor
5	La Bordeta (Barcelona)
6	Camp d'en Grassot i Gràcia Nova
8	Can Baró
9	Can Peguera
10	Canyelles (neighbourhood)
11	El Carmel
12	Ciutat Meridiana
13	El Clot
14	La Clota
15	El Coll
16	El Congrés i els Indians
17	Les Corts (neighbourhood)
18	Diagonal Mar i el Front Marítim del Poblenou
19	Dreta de l'Eixample
20	La Font d'en Fargues
21	La Font de la Guatlla

2- With GEOCODER:

```
bcn_data.head()
```

	Neighbourhood	Latitude	Longitude
0	El Baix Guinardó	41.41022	2.16879
1	La Barceloneta, Barcelona	41.38185	2.19151
2	Baró de Viver	41.44804	2.19963
3	El Besòs i el Maresme	41.41666	2.21392
4	Bon Pastor	41.43636	2.20325

3- Let's plot map of Barcelona using latitude and longitude values.

4- Create clusters with KMEANS:

	Neighbourhood	Neighbourhood Latitude	Neighbourhood Longitude	Venue Name	Venue Category	Venue Latitude	Venue Longitude
0	El Baix Guinardó	41.41022	2.16879	El Rey Del Jamon	Tapas Restaurant	41.410043	2.169828
1	El Baix Guinardó	41.41022	2.16879	Jardins del Príncep de Girona	Park	41.410010	2.169386
2	El Baix Guinardó	41.41022	2.16879	Basilicata	Latin American Restaurant	41.410857	2.166199
3	El Baix Guinardó	41.41022	2.16879	Xiringuito Aigua	Beer Garden	41.409806	2.168379
4	El Baix Guinardó	41.41022	2.16879	Marisquería A Estrela Galega	Spanish Restaurant	41.410553	2.171362

	Neighbourhood	African Restaurant	Arepa Restaurant	Argentinian Restaurant	Art Gallery	Art Museum	Arts & Crafts Store	Asian Restaurant
0	Baró de Viver	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	Bon Pastor	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	Camp d'en Grassot i Gràcia Nova	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	Can Baró	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	Can Peguera	0.0	0.0	0.0	0.0	0.0	0.0	0.0

5- analyze neighbourhoods of Barcelona

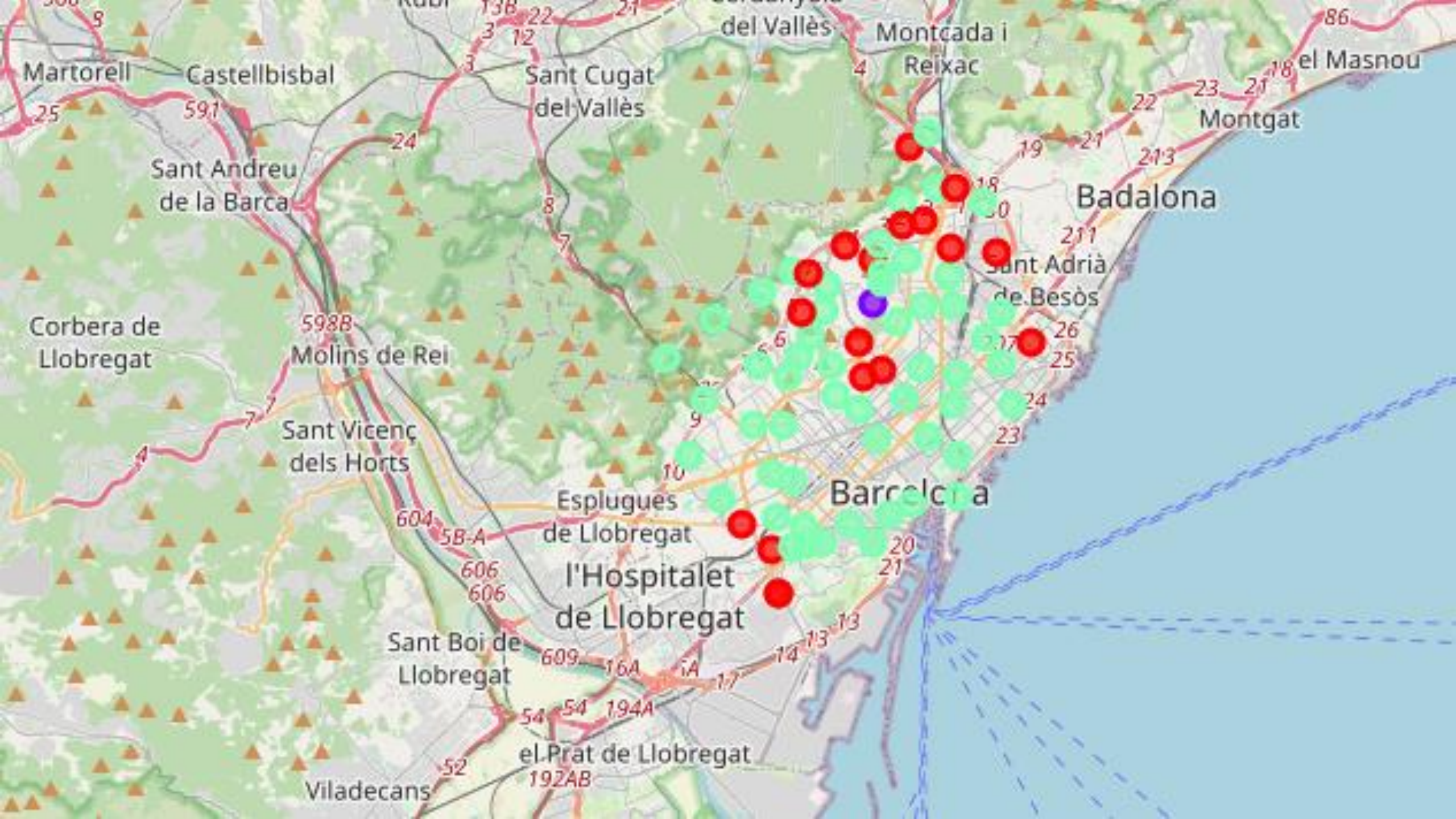## 6- In Which neighbourhood there are Spanish Restaurants?

```
len(bcn_grouped[bcn_grouped["Spanish Restaurant"] > 0])
```

```
31
```

```
to_spain = bcn_grouped[["Neighbourhood","Spanish Restaurant"]]
to_spain.head(10)
```

	Neighbourhood	Spanish Restaurant
0	Baró de Viver	0.000000
1	Bon Pastor	0.000000
2	Camp d'en Grassot i Gràcia Nova	0.050000
3	Can Baró	0.000000
4	Can Peguera	0.000000
5	Canyelles (neighbourhood)	0.250000
6	Ciutat Meridiana	0.000000
7	Diagonal Mar i el Front Marítim del Poblenou	0.125000
8	Dreta de l'Eixample	0.000000
9	El Baix Guinardó	0.083333

	Neighbourhood	Latitude	Longitude	Cluster Labels	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue
0	El Baix Guinardó	41.41022	2.16879	0	Grocery Store	Tapas Restaurant	Latin American Restaurant	Arepa Restaurant	Hotel	Spanish Restaurant	Beer Garden
1	La Barceloneta, Barcelona	41.38185	2.19151	2	Bar	Mediterranean Restaurant	Italian Restaurant	Spanish Restaurant	Beach	Sushi Restaurant	Soccer Field
2	Baró de Viver	41.44804	2.19963	2	Plaza	Bakery	Metro Station	Dog Run	Gift Shop	Bar	Football Stadium
3	El Besòs i el Maresme	41.41666	2.21392	0	Bakery	General Entertainment	Bar	Farmers Market	Yoga Studio	Fountain	Football Stadium
4	Bon Pastor	41.43636	2.20325	0	Café	Metro Station	Athletics & Sports	Yoga Studio	Fast Food Restaurant	Fountain	Football Stadium
5	La Bordeta (Barcelona)	41.36986	2.13622	0	Plaza	Coffee Shop	Food & Drink Shop	Spanish Restaurant	Grocery Store	Restaurant	Bakery
6	Camp d'en Grassot i Gràcia Nova	41.40859	2.16382	0	Bakery	Bar	Café	Supermarket	Farmers Market	Jazz Club	Spanish Restaurant
7	El Camp de l'Arpa del Clot	41.41068	2.18063	2	Burger Joint	Bakery	Restaurant	Italian Restaurant	Grocery Store	Hostel	South American Restaurant

	Neighbourhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue
0	El Baix Guinardó	Grocery Store	Tapas Restaurant	Latin American Restaurant	Arepa Restaurant	Hotel	Spanish Restaurant	Beer Garden
3	El Besòs i el Maresme	Bakery	General Entertainment	Bar	Farmers Market	Yoga Studio	Fountain	Football Stadium
4	Bon Pastor	Café	Metro Station	Athletics & Sports	Yoga Studio	Fast Food Restaurant	Fountain	Football Stadium
5	La Bordeta (Barcelona)	Plaza	Coffee Shop	Food & Drink Shop	Spanish Restaurant	Grocery Store	Restaurant	Bakery
6	Camp d'en Grassot i Gràcia Nova	Bakery	Bar	Café	Supermarket	Farmers Market	Jazz Club	Spanish Restaurant
8	Can Baró	Plaza	Grocery Store	Basketball Court	Football Stadium	Food Court	Food & Drink Shop	Food
9	Can Peguera	Café	Playground	Dog Run	Grocery Store	Yoga Studio	Football Stadium	Food Court
10	Canyelles (neighbourhood)	Spanish Restaurant	Bakery	Restaurant	Mediterranean Restaurant	Football Stadium	Food Court	Food & Drink Shop
12	Ciutat Meridiana	Plaza	Park	Metro Station	Grocery Store	Dessert Shop	Farmers Market	Food Court
27	Horta, Barcelona	Bakery	Plaza	Metro Station	Sandwich Place	Football Stadium	Food Court	Food & Drink Shop

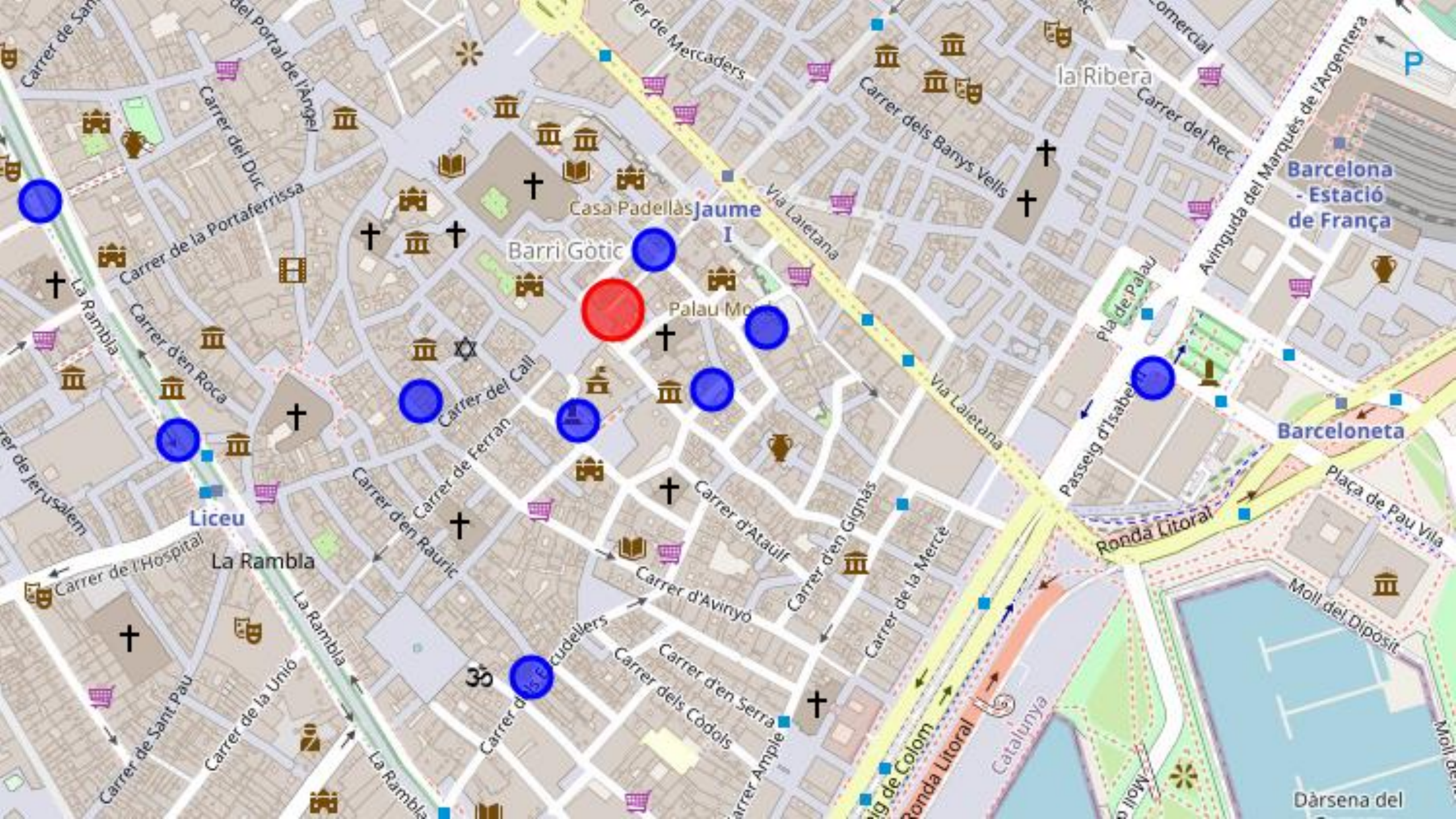|	Neighbourhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue
20	La Font d'en Fargues	Gym / Fitness Center	Yoga Studio	Falafel Restaurant	Football Stadium	Food Court	Food & Drink Shop	Food

```python
val = 3
bcn_final.loc[bcn_final['Cluster Labels'] == (val - 1), bcn_final.columns[[0] + np.arange(4, bcn_final.shape[1]).tolist()]]
```

	Neighbourhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue
1	La Barceloneta, Barcelona	Bar	Mediterranean Restaurant	Italian Restaurant	Spanish Restaurant	Beach	Sushi Restaurant	Soccer Field
2	Baró de Viver	Plaza	Bakery	Metro Station	Dog Run	Gift Shop	Bar	Football Stadium
7	El Camp de l'Arpa del Clot	Burger Joint	Bakery	Restaurant	Italian Restaurant	Grocery Store	Hostel	South American Restaurant
11	El Carmel	Park	Garden	Food Court	Dog Run	Donut Shop	Yoga Studio	Football Stadium
13	El Clot	Tapas Restaurant	Park	Wine Shop	Plaza	Historic Site	Post Office	Spanish Restaurant
14	La Clota	Spanish Restaurant	Museum	Hostel	Sculpture Garden	Falafel Restaurant	Food Court	Food & Drink Shop
		Mediterranean						

	name	categories	address	lat	lng	labeledLatLngs	distance	postalCode	cc	city	state	country	formattedAddress	crossStre
1	Restaurant Sant Jaume	Spanish Restaurant	NaN	41.383399	2.177881	[{'label': 'display', 'lat': 41.383399, 'lng':...	67	NaN	ES	NaN	NaN	España	[España]	N
5	Pla Restaurant	Spanish Restaurant	Carrer de Bellafila, 5	41.382227	2.178538	[{'label': 'display', 'lat': 41.38222678516860...	118	08002	ES	Barcelona	Cataluña	España	[Carrer de Bellafila, 5, 08002 Barcelona Catal...	N
6	Now-spanish	Spanish Restaurant	NaN	41.381811	2.172627	[{'label': 'display', 'lat': 41.381811, 'lng':...	419	NaN	ES	NaN	NaN	España	[España]	N
7	Restaurant CentOnze	Spanish Restaurant	La Rambla, 111	41.383796	2.171109	[{'label': 'display', 'lat': 41.38379580826611...	537	NaN	ES	Barcelona	Cataluña	España	[La Rambla, 111, Barcelona Cataluña, España]	N
9	Mi Burrito y Yo Restaurante	Spanish Restaurant	NaN	41.381975	2.177052	[{'label': 'display', 'lat': 41.38197500932306...	107	NaN	ES	NaN	NaN	España	[España]	N
12	Mercer Restaurant Jean Luc Figueras	Spanish Restaurant	NaN	41.382744	2.179134	[{'label': 'display', 'lat': 41.382744, 'lng':...	143	NaN	ES	NaN	NaN	España	[España]	N
17	7 Portes	Spanish Restaurant	Passeig d'Isabel II, 14	41.382335	2.183399	[{'label': 'display', 'lat': 41.38233512950261...	502	08003	ES	Barcelona	Cataluña	España	[Passeig d'Isabel II, 14, 08003 Barcelona Cata...	N

All Spanish Restaurant in radius 500 meters to Majestic Hotel

```
1                                Restaurant Sant Jaume
5                                       Pla Restaurant
6                                          Now-spanish
7                                   Restaurant CentOnze
9                         Mi Burrito y Yo Restaurante
12          Mercer Restaurant Jean Luc Figueras
17                                            7 Portes
19                                    Colom Restaurant
22                                    Nexes Restaurant
26                                       Terrace Caliu
Name: name, dtype: object
```

6. Conclusion

- I see there are 8 Spanish Restaurants around Majestic Hotel location them, currently on Barri Gotic.

- There are two good oportunities at Camp d'en Grassot i Gràcia Nova and at Vall d'Hebron and at Clot.

- If I consider more items I can see first option is better than last other because, in there place there are few seafood and mediterranian restaurants but it's important item for their neighbours and transit turism is better than other option.

THANKS!!!