

Classifying two major cities in Australia

Data needed:

We will use geolocation data dataset- Australia Post code data set, where post code, suburb name and lat long given. This data will be uploaded to github. This data will be used to identifying Sydney and Melbourne Suburbs.

```
i]: aus_suburb_post.head(4)
```

	postcode	locality	State	long	lat	id
0	6532	CARRARANG	WA	115.004595	-28.440886	10861
1	6532	COBURN	WA	115.004595	-28.440886	10862
2	6532	COOLCALALAYA	WA	115.004595	-28.440886	10863
3	6532	DARTMOOR	WA	115.004595	-28.440886	10864

NSW data

```
i]: nsw_suburb_post=aus_suburb_post[aus_suburb_post['State']=='NSW']
```

```
i]: nsw_suburb_post.head(3)
```

	postcode	locality	State	long	lat	id
1214	2824	MARTHAGUY	NSW	147.785831	-31.373201	5186
1215	2824	MOUNT FOSTER	NSW	147.785831	-31.373201	5187
1216	2824	MOUNT HARRIS	NSW	147.785831	-31.373201	5188

- Foursquare data

This data will be collected from Foursquare web site using API.

1. Foursquare API will be used to query each of the neighbourhood
2. Data frame will be created for preferred facilities
(1. Movie 2. Shopping Mall 3. Turkish Restaurant 4. Bus 5. Train 6. Fish 7. Gym)

[25]:

	Neighborhood	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
0	LEWISHAM,NSW,2049	-33.897219	151.15085	Sweet Belem	-33.896292	151.153737	Café
1	LEWISHAM,NSW,2049	-33.897219	151.15085	Silvas	-33.896410	151.154070	Portuguese Restaurant
2	LEWISHAM,NSW,2049	-33.897219	151.15085	Frango	-33.896369	151.153462	Portuguese Restaurant
3	LEWISHAM,NSW,2049	-33.897219	151.15085	The Pig & Pastry	-33.890559	151.149074	Café
4	LEWISHAM,NSW,2049	-33.897219	151.15085	The Tiny Giant	-33.895178	151.154132	Café

Shopping Mall

```
sydney_venues_shopping_station=subset_df_by_category(category_name='Shopping Mall',df_name=sydney_venues)
sydney_venues_shopping_station.head(3)
```

	Neighborhood	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
0	ARTARMON,NSW,2064	-33.813209	151.183801	Westfield Chatswood	-33.797045	151.183185	Shopping Mall
1	CHATSWOOD,NSW,2067	-33.798378	151.177110	Chatswood Chase	-33.794643	151.186131	Shopping Mall
2	CHATSWOOD,NSW,2067	-33.798378	151.177110	Westfield Chatswood	-33.797045	151.183185	Shopping Mall