



Exploring Coffee Shops in Manchester, UK



Introduction



- **Problem:** coffee is the second most common hot drink in Manchester, UK.
- **Aim:** To find the best coffes shops in the city centre of Manchester.
- **Interested audience:** residents, tourists, companies to open a coffee shop

Data acquisition and cleaning

- Data is obtained from various sources on the internet.

```
[4]:
```

	Postcode	Post town	Coverage	Local authority area	latitude	longitude
0	M1	MANCHESTER	Piccadilly, City Centre, Market Street	Manchester	53.477340	-2.235080
1	M2	MANCHESTER	Deansgate, City Centre	Manchester	53.480030	-2.242630
2	M3	MANCHESTER	City Centre, Deansgate, Castlefield	Manchester	53.483610	-2.250180
3	M3	SALFORD	Blackfriars, Greengate, Trinity	Salford	53.483610	-2.250180
4	M4	MANCHESTER	Ancoats, Northern Quarter, Strangeways	Manchester	53.484550	-2.229090
5	M5	SALFORD	Ordsall, Seedley, Weaste, University	Salford	53.479030	-2.284820

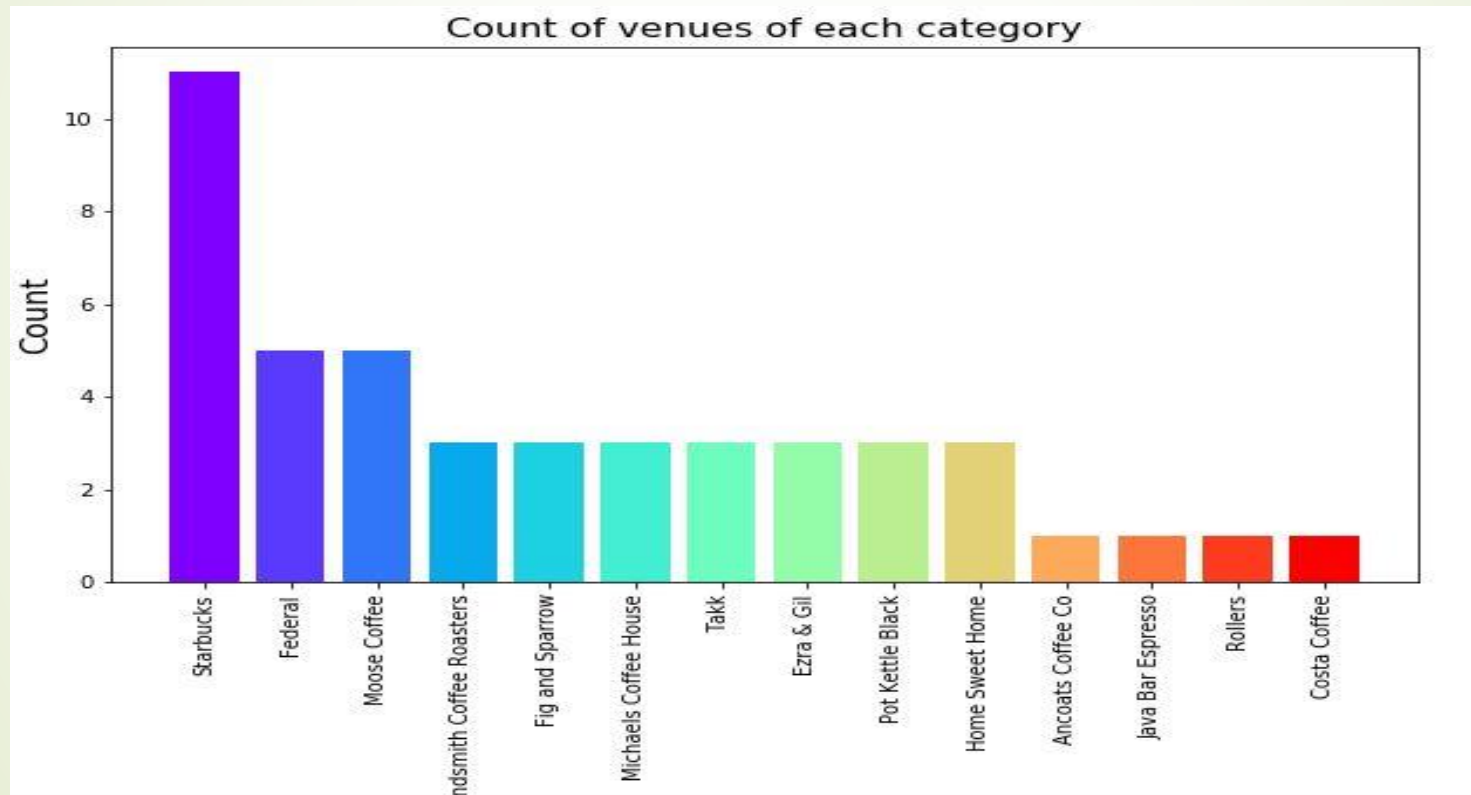
Coffee shops dataset is obtained from Foursquare API.

```
# Extract the coffee shops/cafes
man_coffees = man_venues[(man_venues['Venue Category']=='Coffee Shop') | (man_venues['Venue Category']=='Café')].reset_index(drop = True)
man_coffees
```

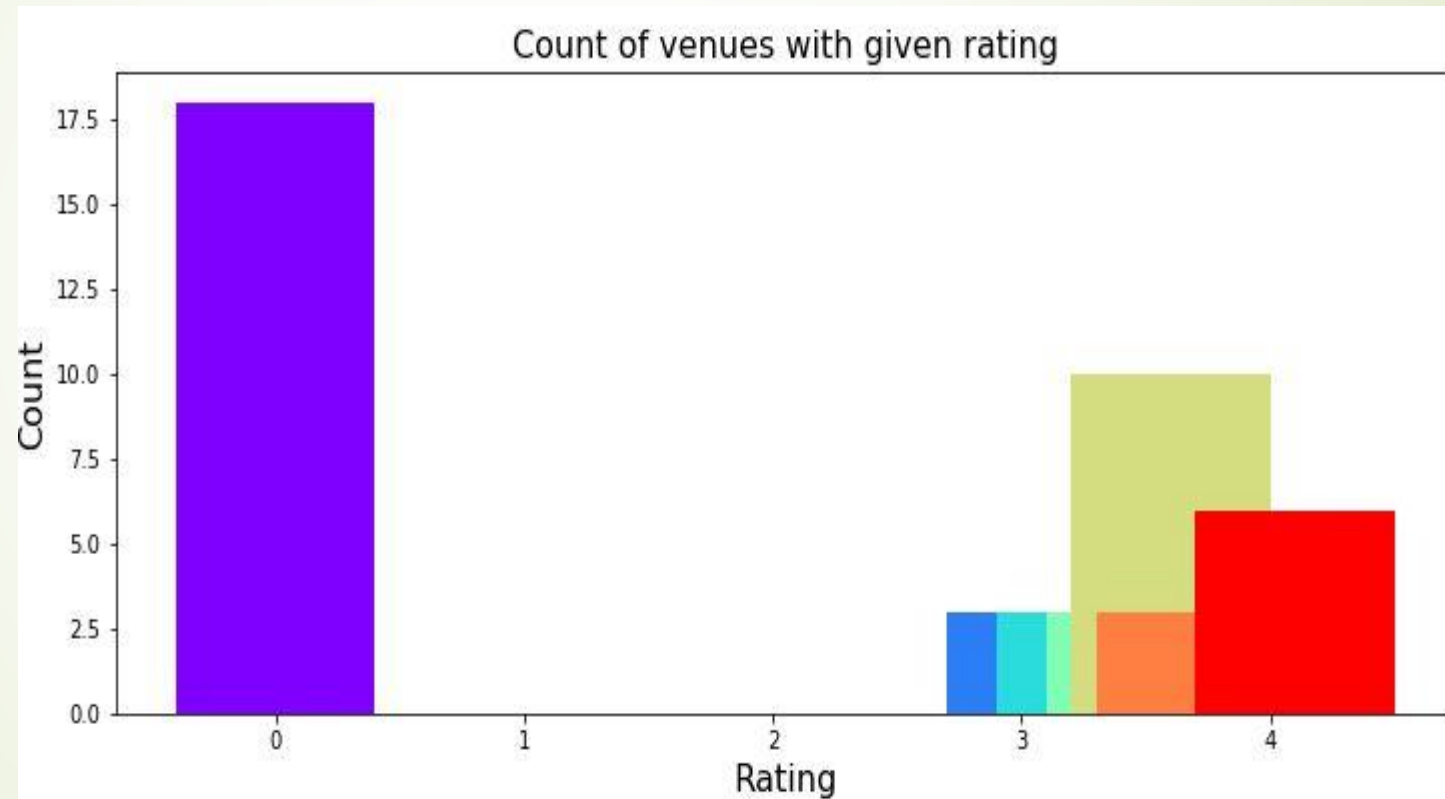
	Coverage	Coverage Latitude	Coverage Longitude	Venue id	Venue	Venue Latitude	Venue Longitude	Venue Category
0	Piccadilly, City Centre, Market Street	53.47734	-2.23508	50ccb105e4b0981e06f7212b	Takk	53.481130	-2.232531	Coffee Shop
1	Piccadilly, City Centre, Market Street	53.47734	-2.23508	57580a2d498e63eb97bbc9be	Idle Hands	53.481288	-2.233041	Coffee Shop
2	Piccadilly, City Centre, Market Street	53.47734	-2.23508	55895f21498e9b51c189fdcd	Ezra & Gil	53.482068	-2.232842	Coffee Shop
3	Piccadilly, City Centre, Market	53.47734	-2.23508	51b0ab4f400ab50a5a6a010f	Eia and Espresso	53.482626	-2.235600	Coffee Shop

Methodology and Exploratory Data Analysis:

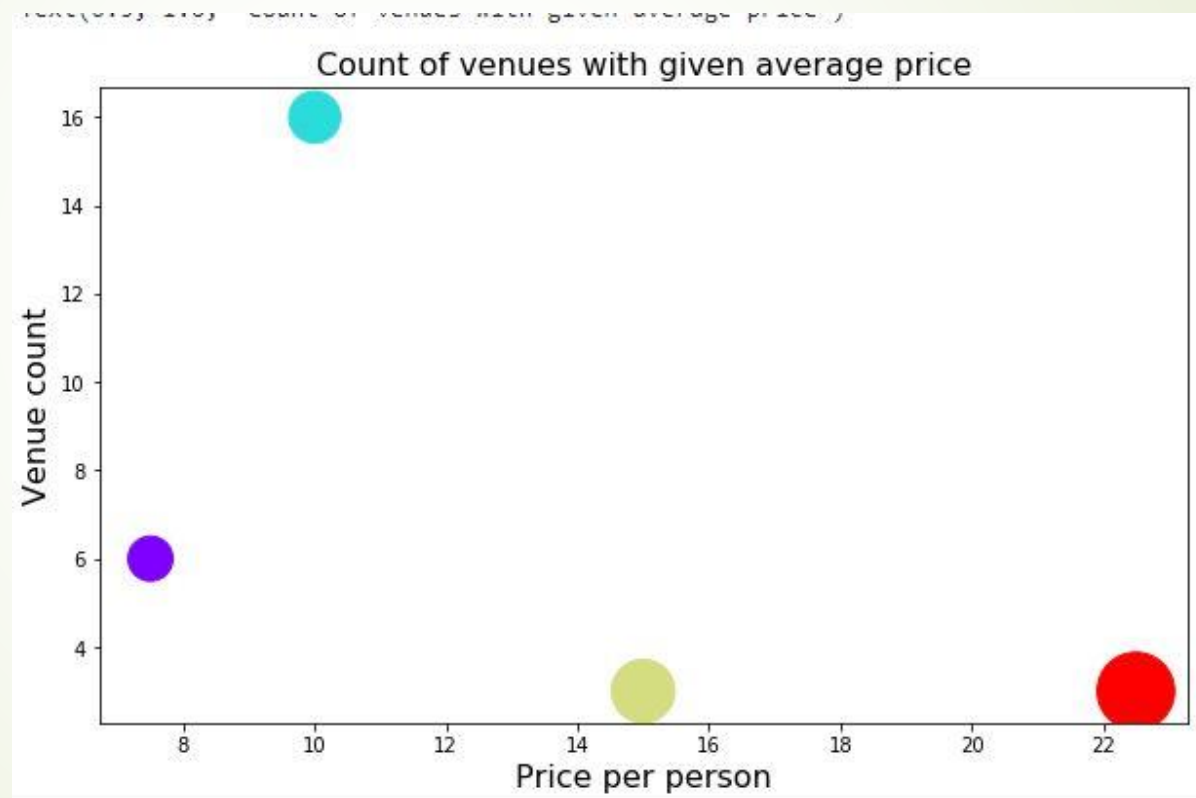
Sturbucks is the most common coffe shop



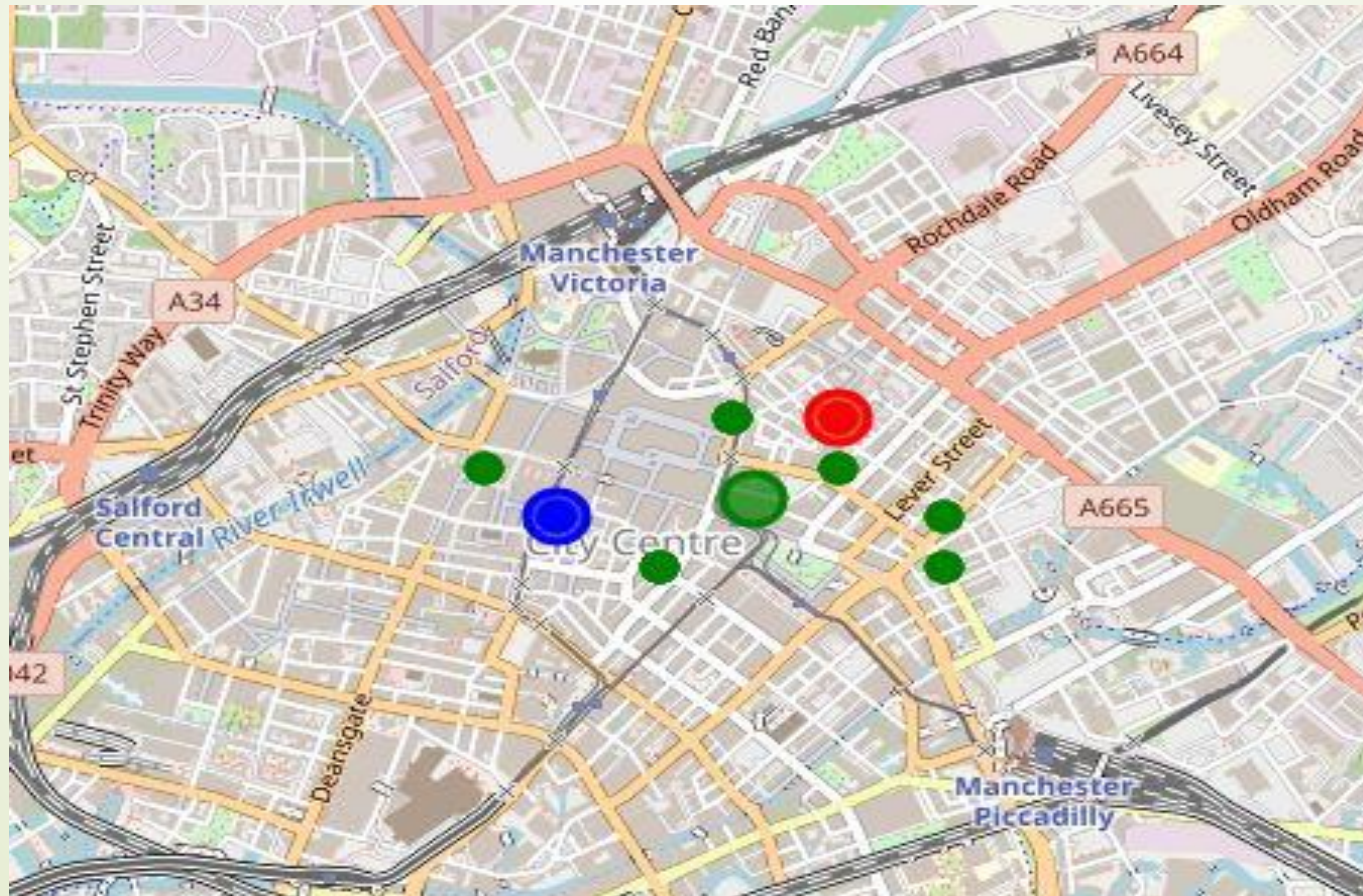
- majority of coffee shops have their rating close to 4



Price:



Clustering





Results and Discussion:

- The majority of coffee shops have ratings close to 4.
 - Many coffee shops have prices which are in the range of £7.5 to £ 22.5 for one person.
 - Most of the places have average price of £10.
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