Name – Sagar Soni   Sub – Big data and data analytics-2

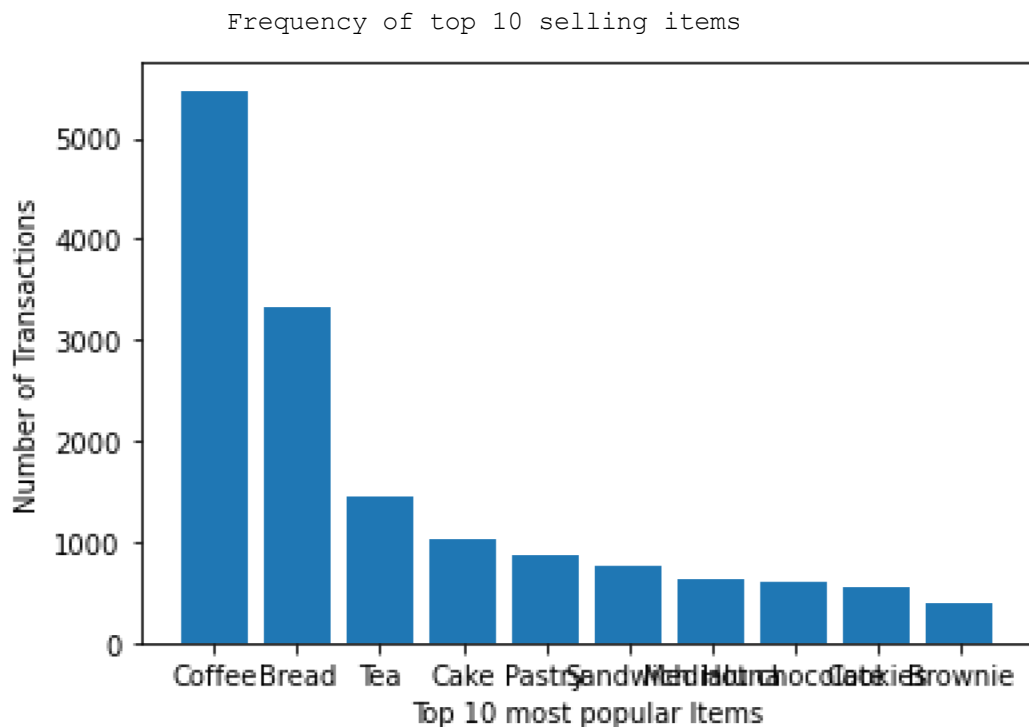Roll no – 180044   Date – 29th August, 2021

Big data Project Activity 1 (week5)

Section – A

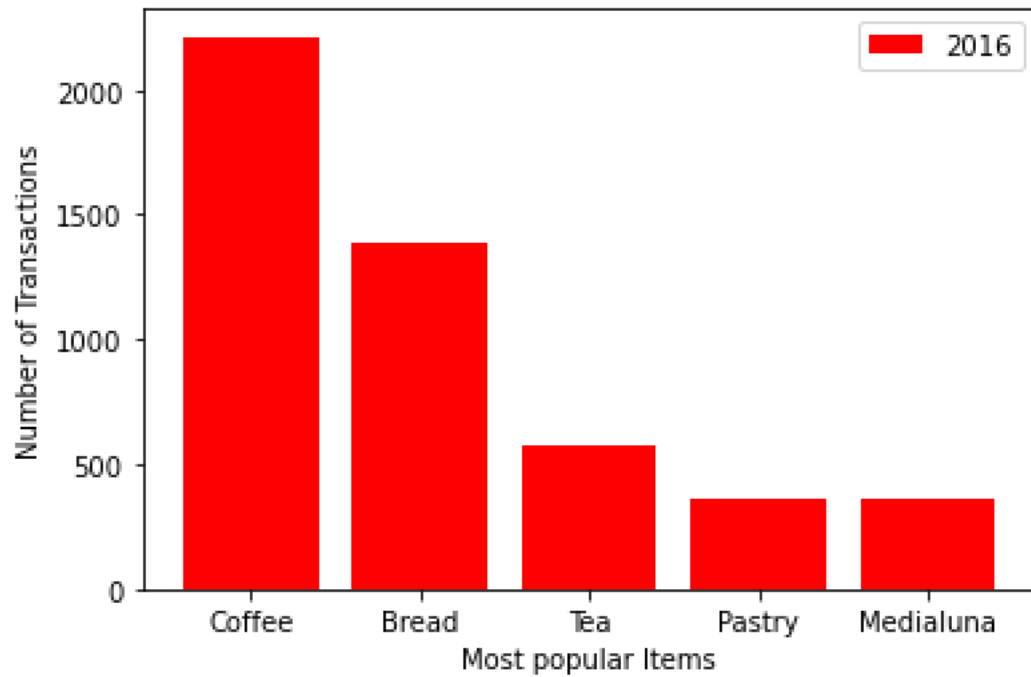**GitHub Link:**

Ans 1:

Frequency of top 10 selling items

Top 10 most popular items:
['Coffee', 'Bread', 'Tea', 'Cake', 'Pastry', 'Sandwich', 'Medialuna',
'Hot chocolate', 'Cookies', 'Brownie']

**Ans 2:**

Five most popular bakery items in 2016

5 most popular items in 2016 is:

	Date	Time	Transaction		Item	Year	Month	\
1	2016-10-30	2020-10-18 09:58:11	1		Bread	2016	10	
2	2016-10-30	2020-10-18 10:05:34	2		Scandinavian	2016	10	
3	2016-10-30	2020-10-18 10:05:34	2		Scandinavian	2016	10	
4	2016-10-30	2020-10-18 10:07:57	3	Hot chocolate	2016	10	4
	2016-10-30	2020-10-18 10:07:57	3		Jam	2016	10	

	Day	Weekday	Hour
1	30	6	9
2	30	6	10
3	30	6	10
4	30	6	10
5	30	6	10

Ans 3:

Five most popular bakery items in 2017
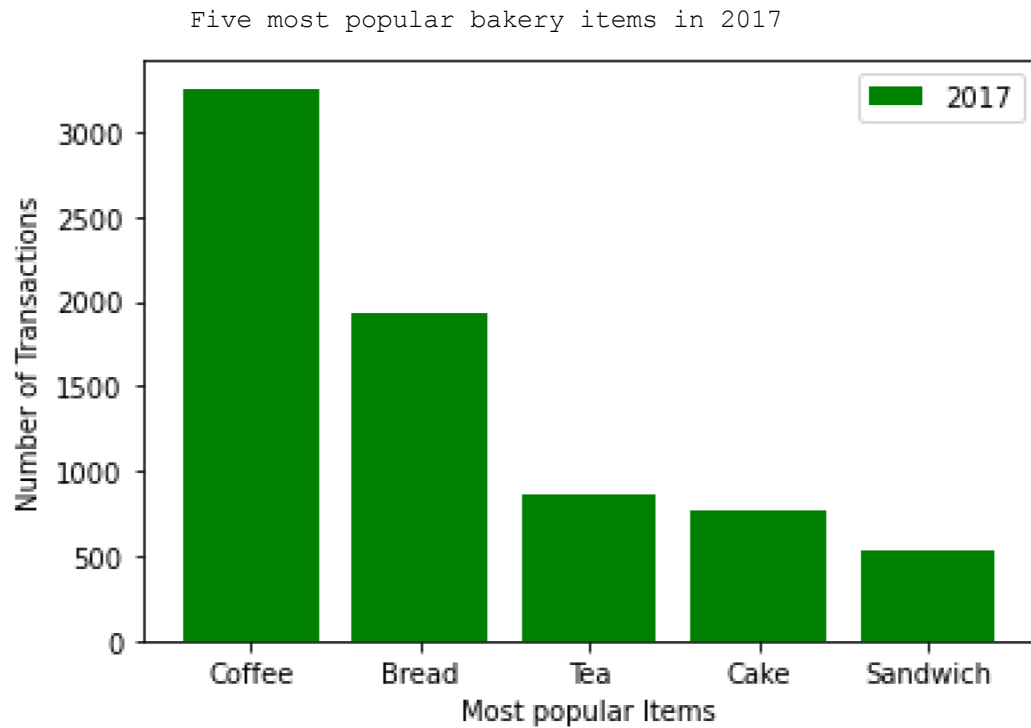
5 most popular items in 2017 is:

	Date	Time	Transaction	Item	Year	Month	\
8561	2017-01-01	2020-10-18 01:21:05	4090	Bread	2017	1	
8562	2017-03-01	2020-10-18 09:08:01	4094	Coffee	2017	3	
8563	2017-03-01	2020-10-18 09:14:31	4095	Coffee	2017	3	
8564	2017-03-01	2020-10-18 09:14:31	4095	Toast	2017	3 8565	
	2017-03-01	2020-10-18 09:17:54	4096	Farm House	2017	3	

	Day	Weekday	Hour
8561	1	6	1
8562	1	2	9
8563	1	2	9
8564	1	2	9
8565	1	2	9

Ans 4:

Five most popular items sold on Monday
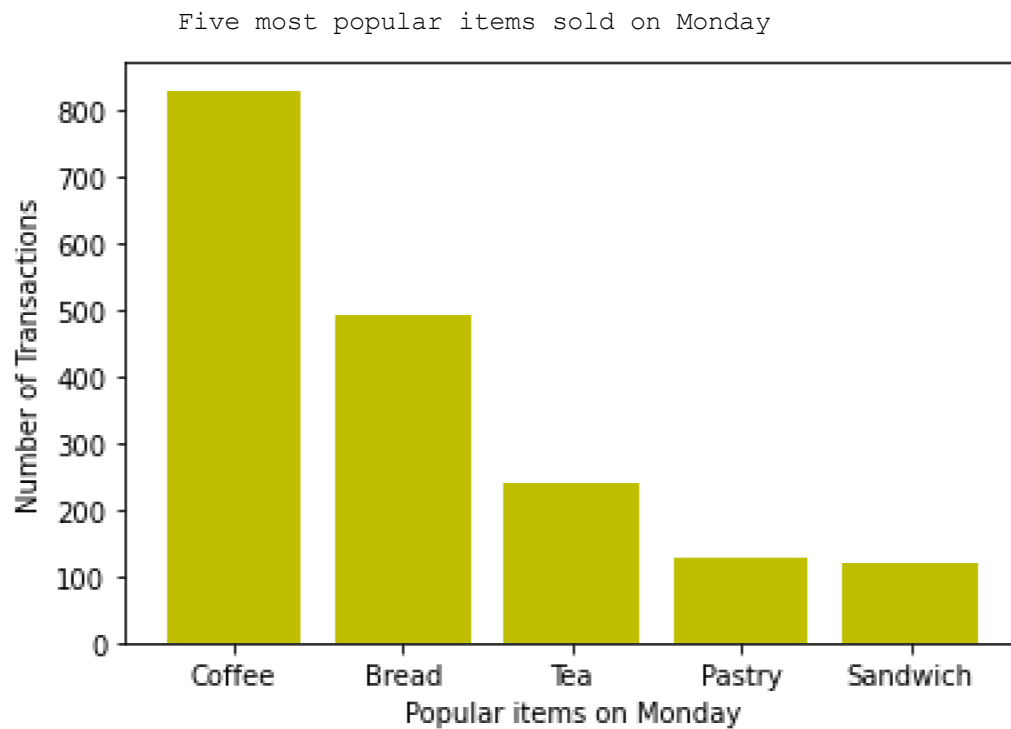
5 most popular items sold on monday is:

	Date	Time	Transaction	Item	Year	Month	Day	\
180	2016-10-31	2020-10-18 08:28:31	81	Coffee	2016	10	31	
181	2016-10-31	2020-10-18 08:28:31	81	Cake	2016	10	31	
182	2016-10-31	2020-10-18 08:47:05	82	Tartine	2016	10	31	
184	2016-10-31	2020-10-18 08:47:05	82	Bread	2016	10	31 185	
	2016-10-31	2020-10-18 08:57:47	83	Coffee	2016	10	31	

	Weekday	Hour
180	0	8
181	0	8
182	0	8
184	0	8
185	0	8

Ans 5:

The number of items sold per month

Number of items sold per month.

Ans 6:

The number of items sold per weekday
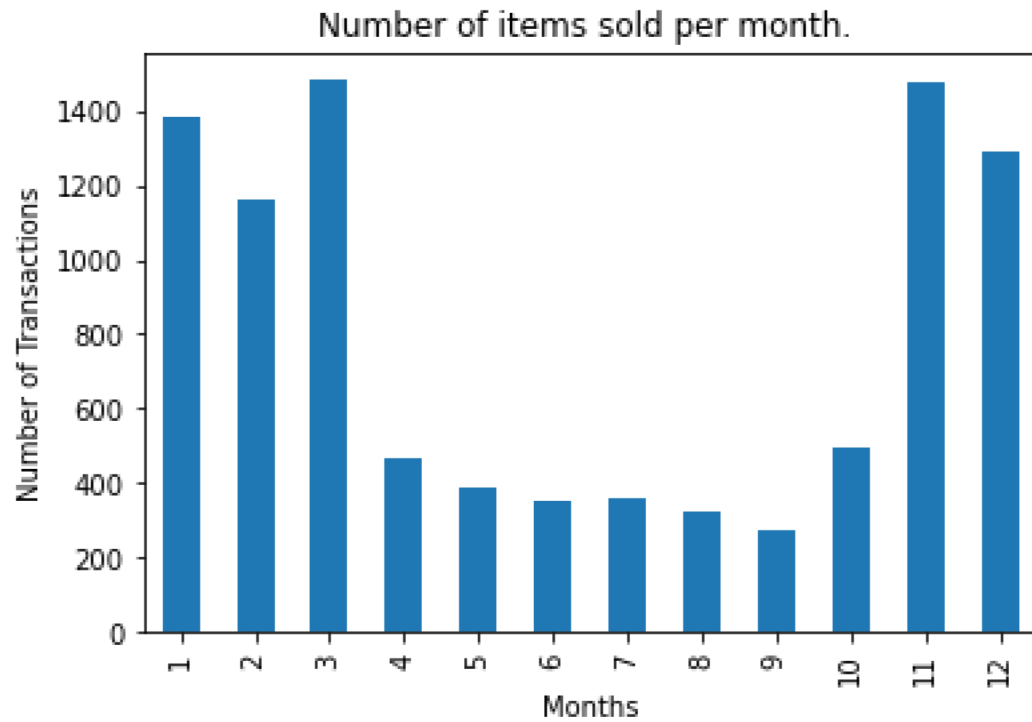
Number of items sold per weekday.
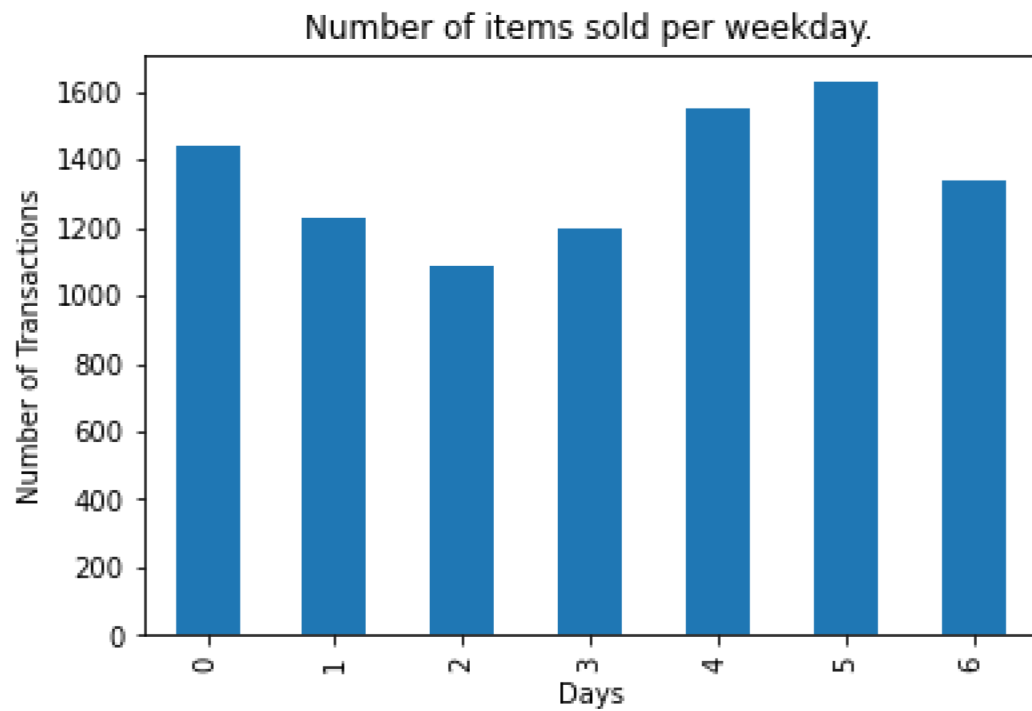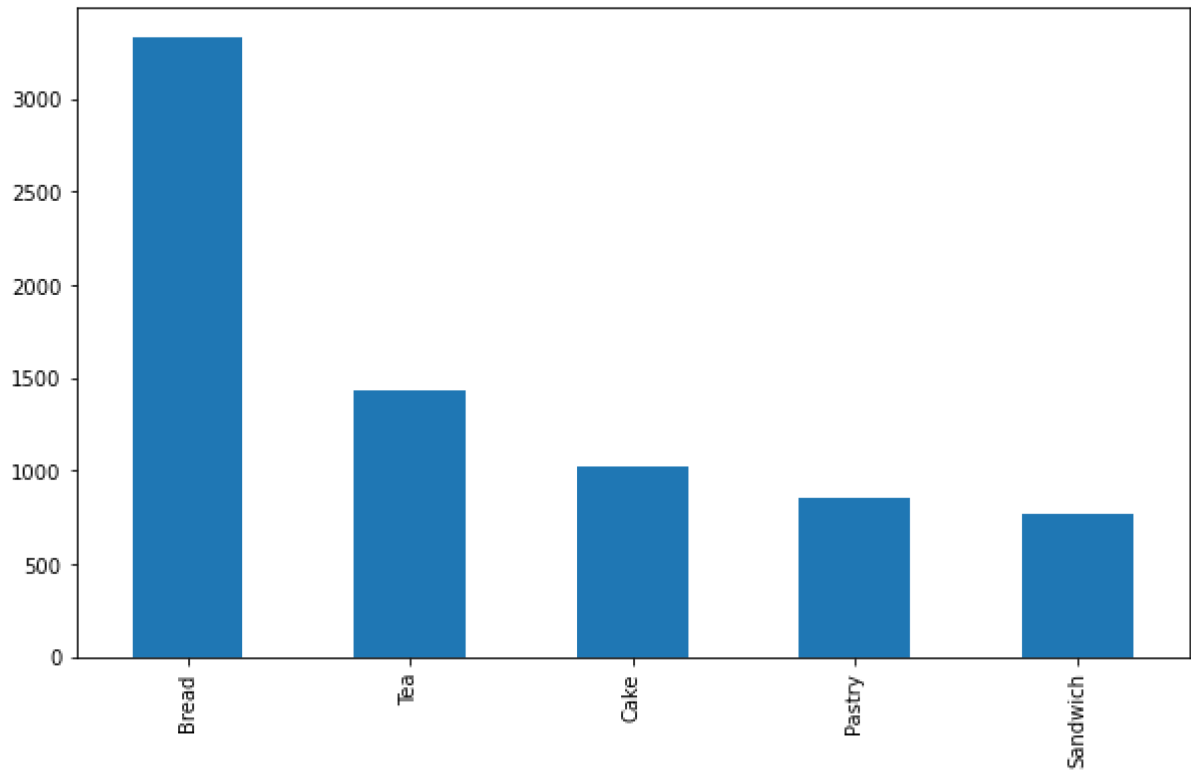
Ans 7:

Number of items sold per hour.
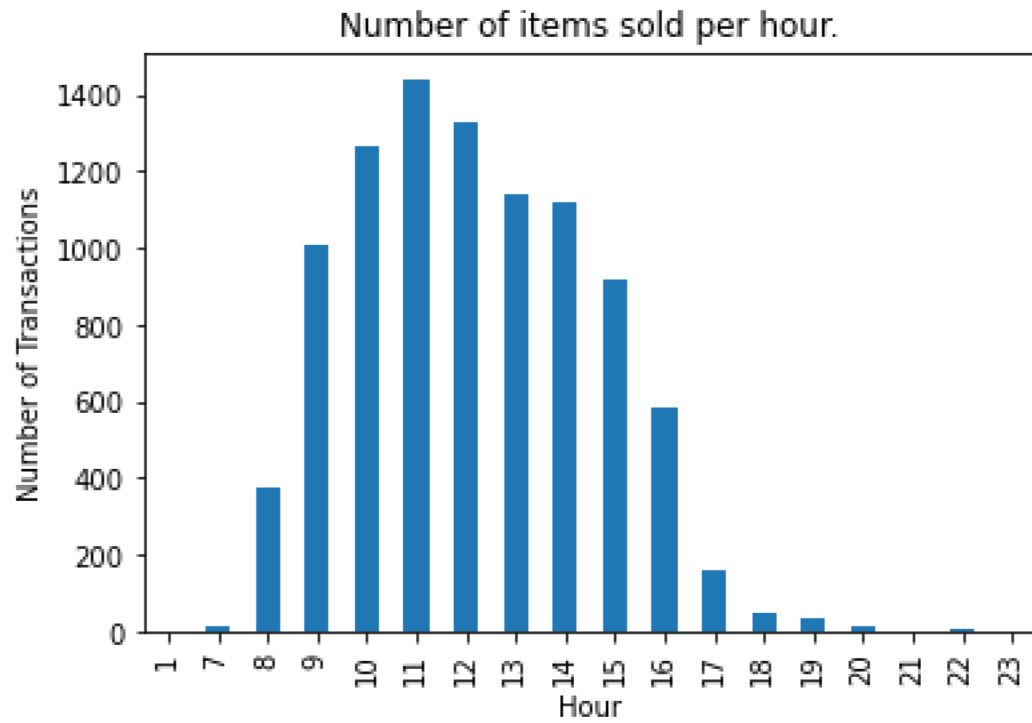
Ans 8:

The best item combinations with coffee

Ans 9:

```
        The five most Coffee Sales day in 2017
               2017-04-02    72
               2017-02-26    57
               2017-04-03    57
               2017-01-28    56
               2017-05-02    55
        Name: Date, dtype: int64
```
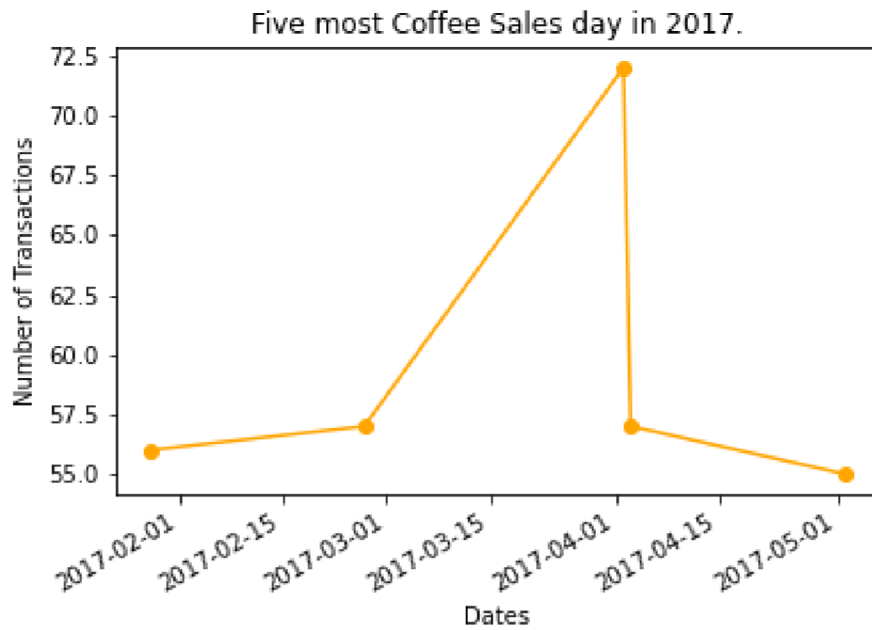
Five most Coffee Sales day in 2017.

Ans 10:

Historical chart of Bread sold throughout the week