

Task 1

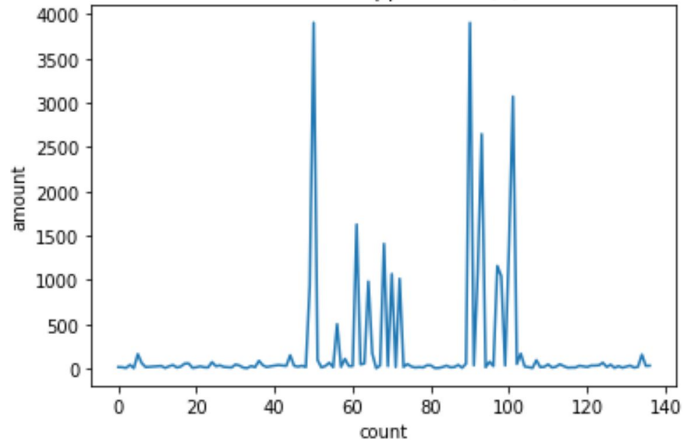
Exploratory Data Analysis

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Transaction analysis

transaction happend on 1/8/18

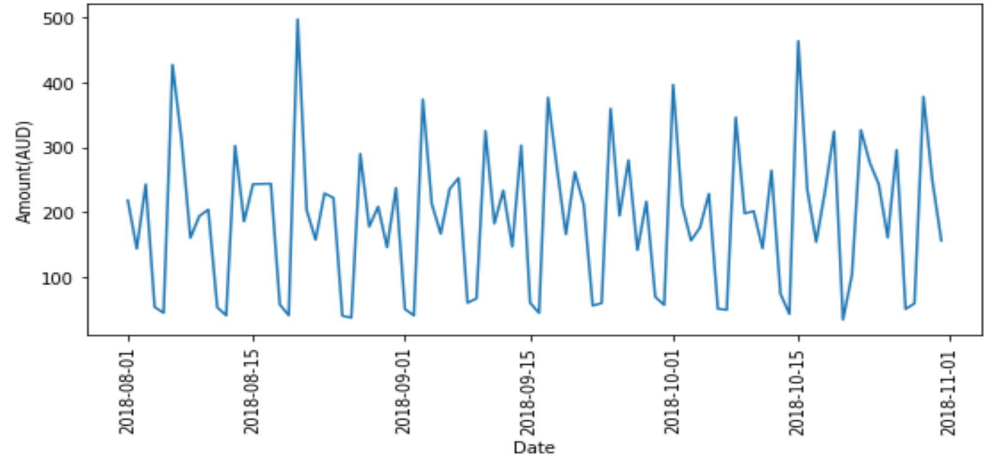


12043 transactions

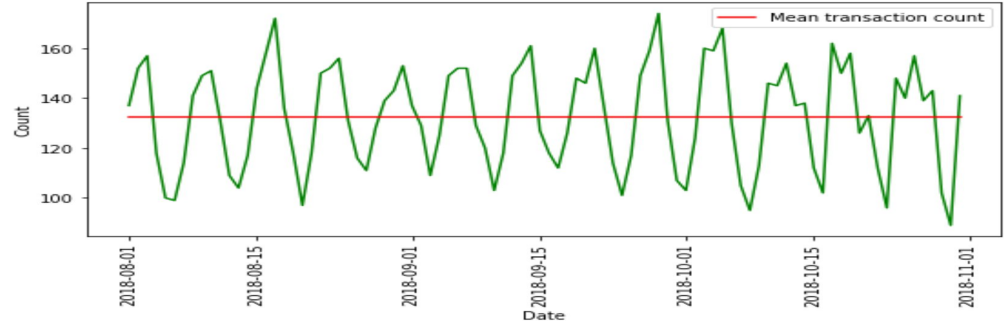
188 average amt of transactions

132 average count of transaction

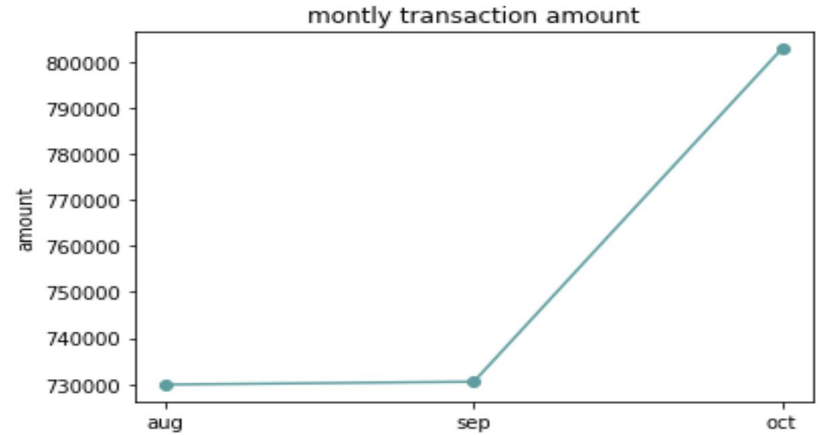
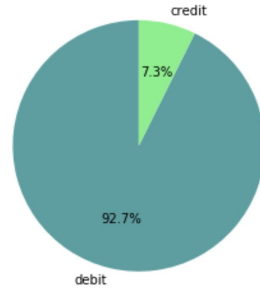
ANZ Mean Transaction Date vs Amount



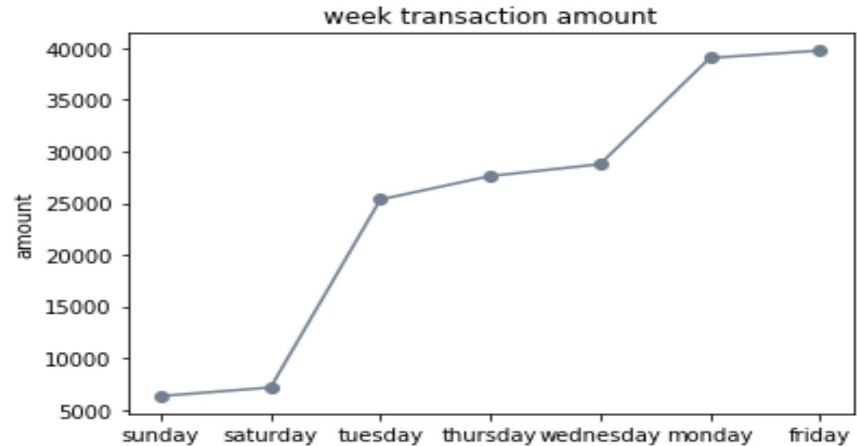
ANZ Transaction count



	amount
movement	
debit	52.572343
credit	1898.728029

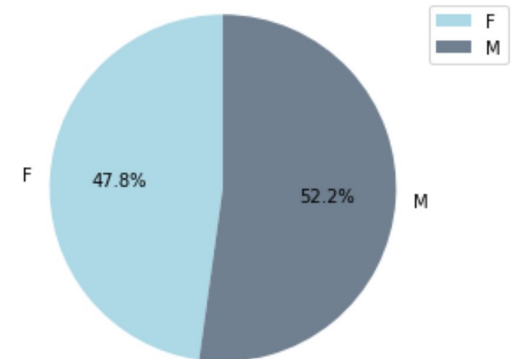
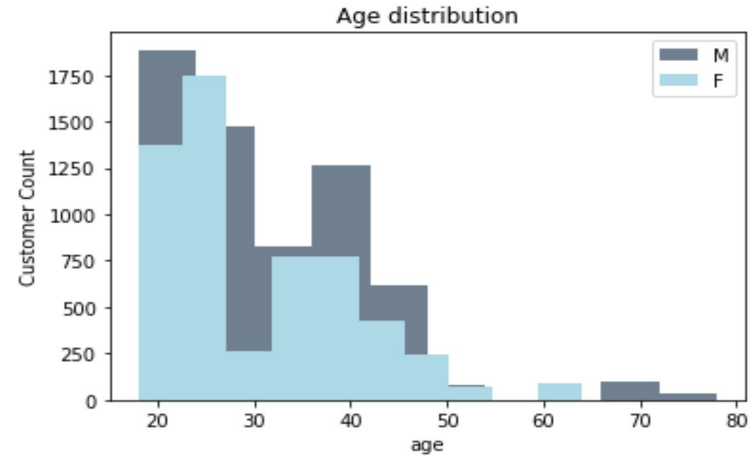


1. People spend more on fridays and mondays mean that there were maximum national holidays on these days in 2018.
2. In october people are spending more might be because october is the time of festivities in australia also winter is coming up so it's the perfect time to stock up winter clothes.
3. Though debit card is used more often than credit card but the amount transferred is more in credit than in debit card.

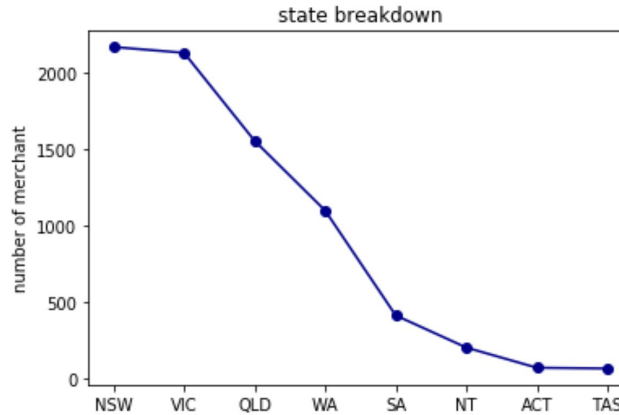
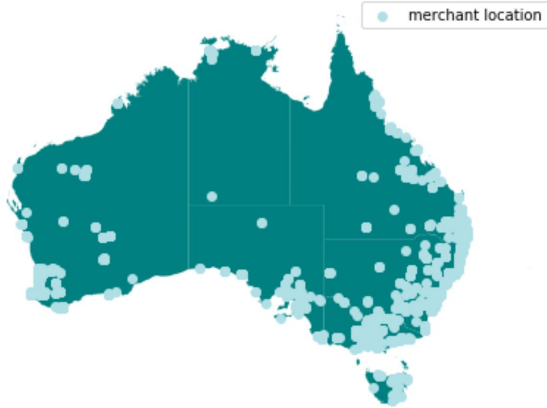


Age and Gender Distribution

1. The average age of the customer is **31**
2. Majority of customers are male but the distribution is relatively even. This is good for banks diversity.
3. Looking at the age distribution plot , we observe that ANZ is popular among the youth (20-30 yrs) in this range we have more female counts which signifies that they are independent and earning.
4. But we also see that in the interval of 50-60 yrs we don't have any customer. which is not good because these age group people have decent income but they might be reducing their expenditure to save .



Merchant Demographics



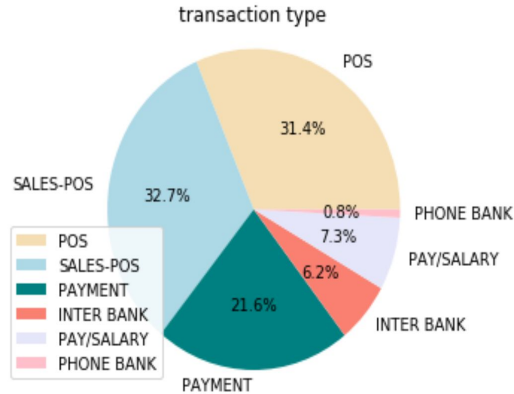
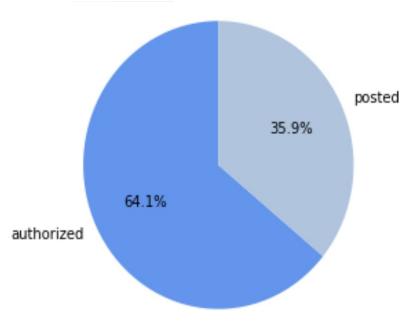
merchant_state	
NSW	2169
VIC	2131
QLD	1556
WA	1100
SA	415
NT	205
ACT	73
TAS	68

1. New south wales and victoria has more than half of the merchant count. Maximum shops are located near sea coast.
2. Western Australia is the largest state with 2.1 million population but the merchants present are less than that of NSW and VIC . ANZ should consider expanding their roots in WA.
3. The total amount of transaction in NT is 9167 AUD. This signifies that transaction is done for rent ,water,gas bills etc and not major money transfer has happened compared to NSW .

amount	

QLD	53483.0
NSW	102022.0
nan	0.0
VIC	87584.0
WA	33992.0
SA	16777.0
NT	9169.0
TAS	1963.0
ACT	4877.0

Additional Information



		card_present_flag
gender	card_present_flag	
F	1.0	3102
	0.0	760
M	1.0	3092
	0.0	763

1. Phone bank is used by approx 1% population while POS is more known to the users. We can halt this service as Tele-banking requires you to access a landline number, and make your choices by pressing the required number, till you reach a phone-banking executive.
2. Females generally use card transaction but the difference is not too high.
3. Around 64% of transaction were authorised which means that there were no card or account issues from bank or customer side

THANK YOU

This project was created in python

For source code :

Github link: https://github.com/cherry247/Data_ANZ_virtual-internship

Linkedin: <https://www.linkedin.com/in/shaili-patel-376663190/>