

ASSIGNMENT GUIDELINES



- Make the changes in the PPT as you solve the parts
- This file contains the template for the **EDA part** of the project.
- Check the instructions added in the note section of every slide for clarity.
- Don't move around any image or text box
- If you require more/lesser elements, be careful when you copy/delete the existing ones.

ASSIGNMENT

Name:- Aryan Roy

Problem Statement

Bank of Corporate conducted a telemarketing campaign for one of its financial products, 'Term deposits', to build a long-term relationship with the existing customers. Your goal is to identify the target customers for the term deposits from the pool of the bank's existing customers. You should also capture the key driving factors (or driver variables) behind the successful conversion of a customer, i.e., the customer opening a term deposit account with the bank.

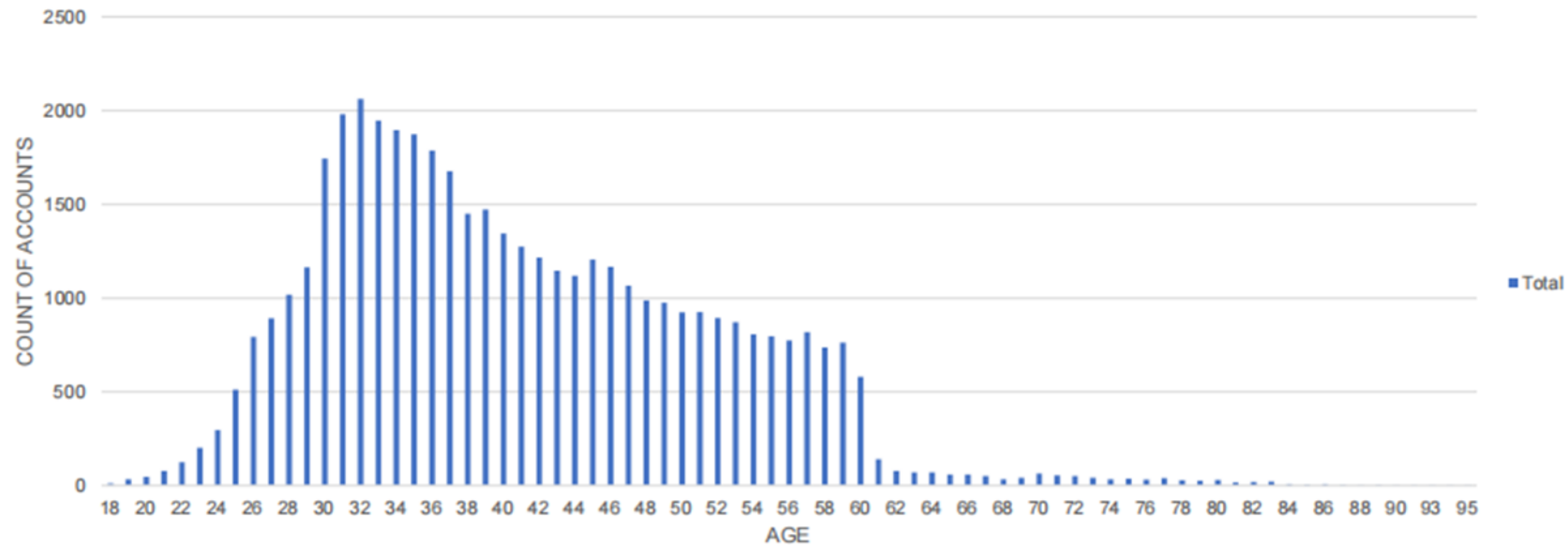
Assignment Objective

To identify the target customers and the driving factors behind a successful customer conversion for future marketing campaigns.

PART I : Univariate Analysis

Variable under consideration: AGE

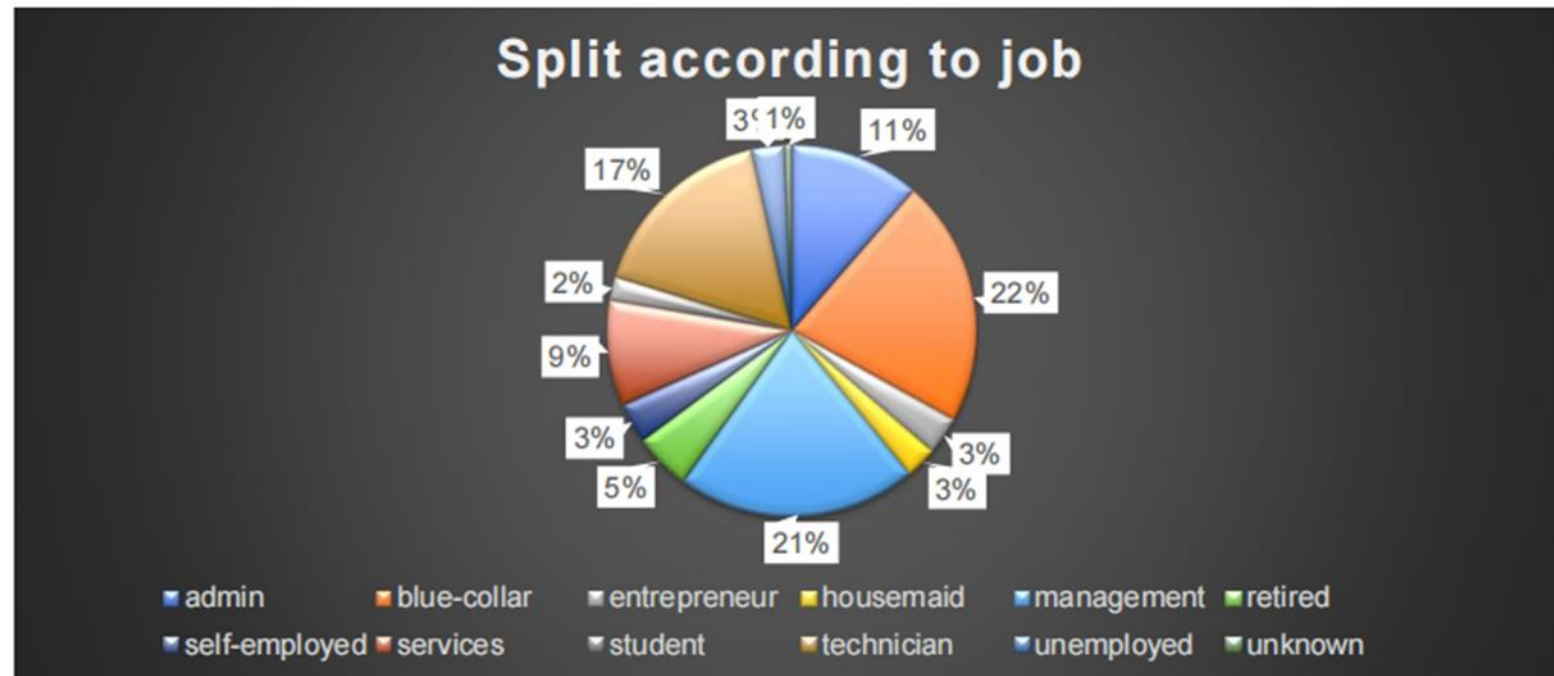
- Maximum accounts are of the age from 30 yrs to 38 yrs in the given data



PART I : Univariate Analysis

Variable under consideration: JOB

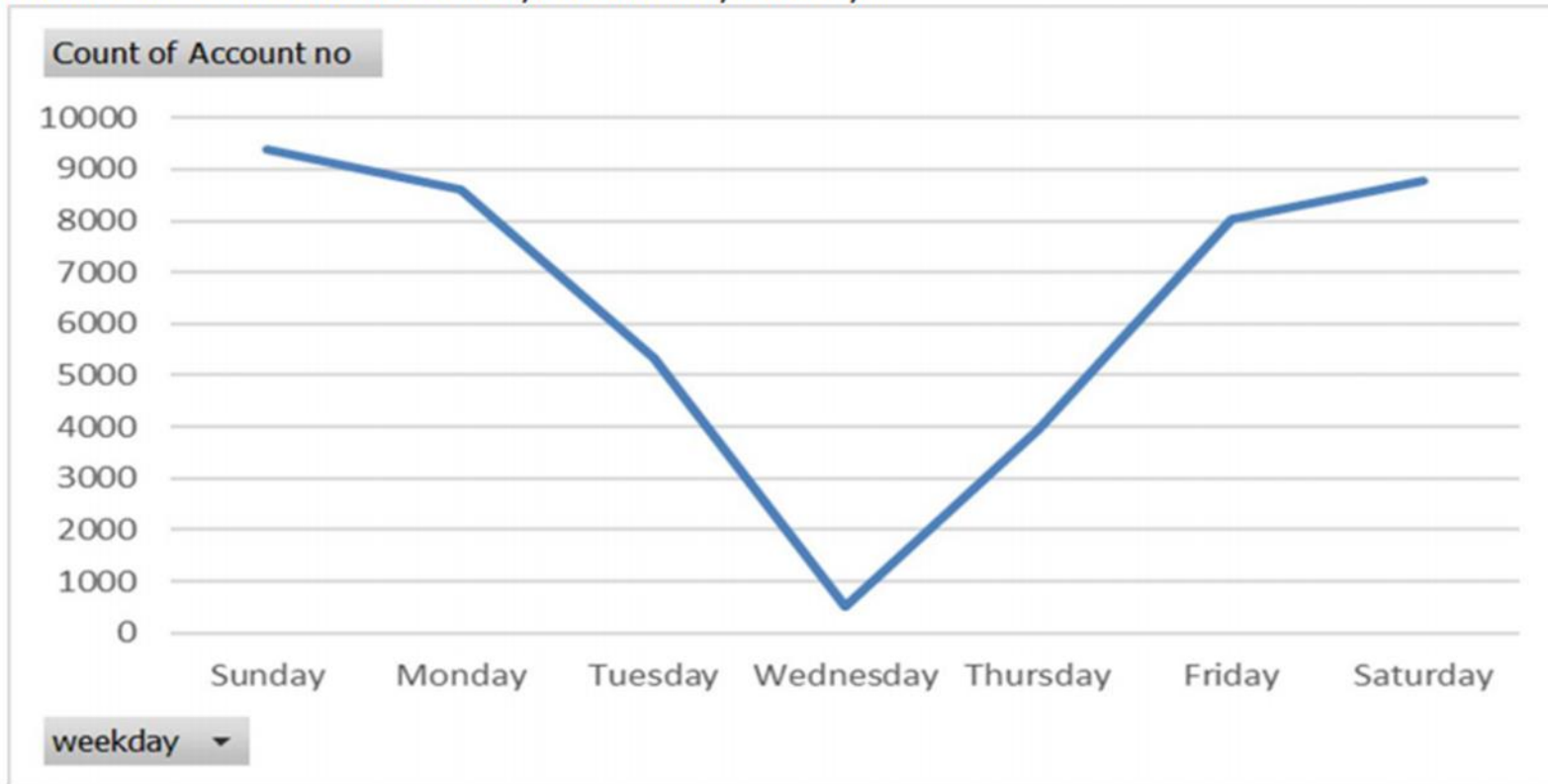
Maximum accounts are of the blue-collar in the given data



PART I : Univariate Analysis

Variable under consideration: WEEKDAYS

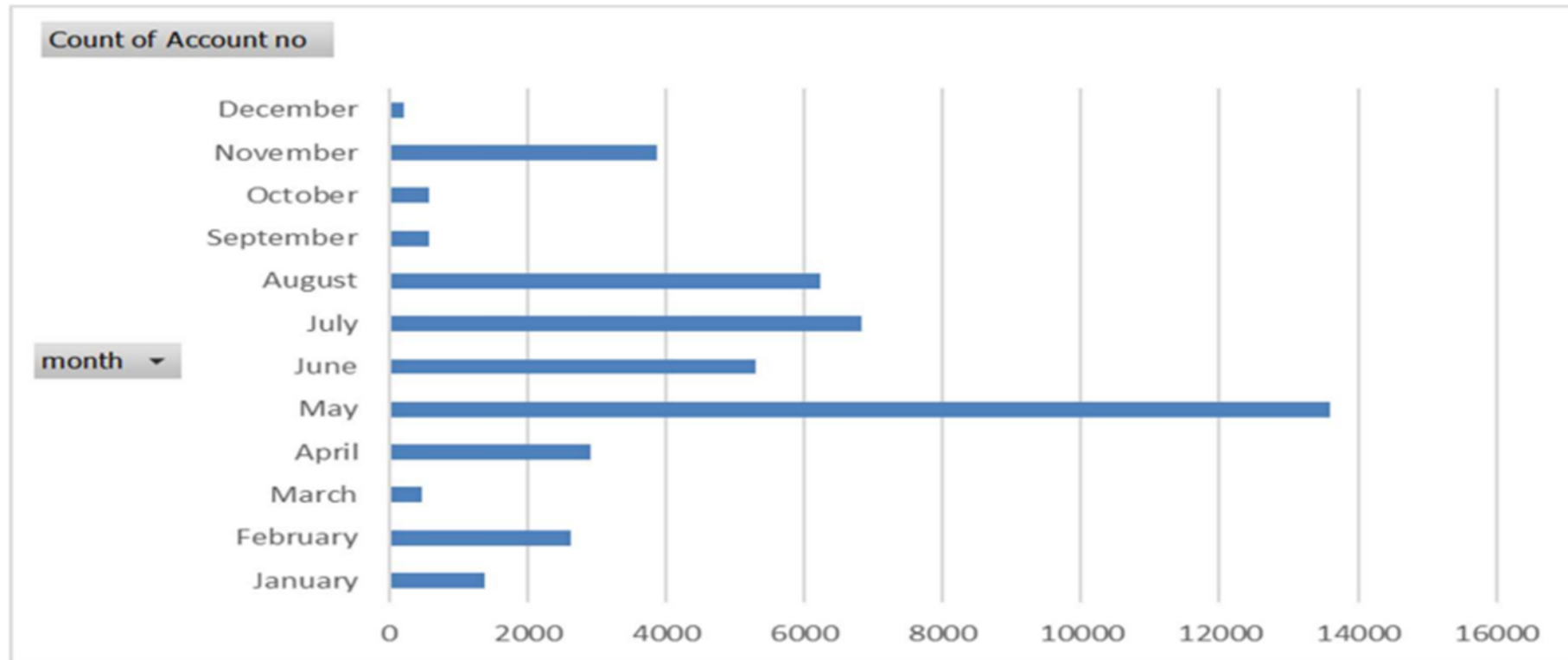
Mostly account holders are reached out on Sundays followed by Mondays.



PART I : Univariate Analysis

Variable under consideration: MONTH

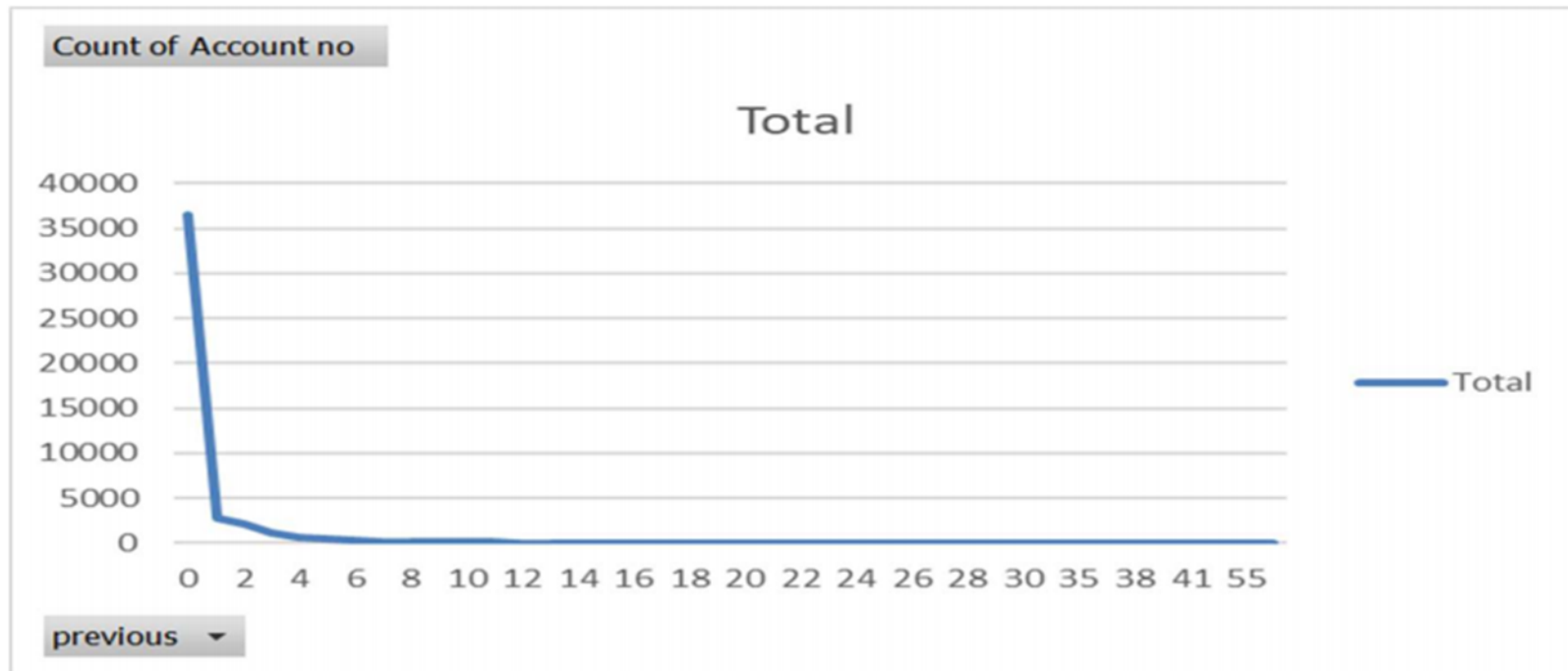
Mostly account holders are reached out in the month of May.



PART I : Univariate Analysis

Variable under consideration: PREVIOUS

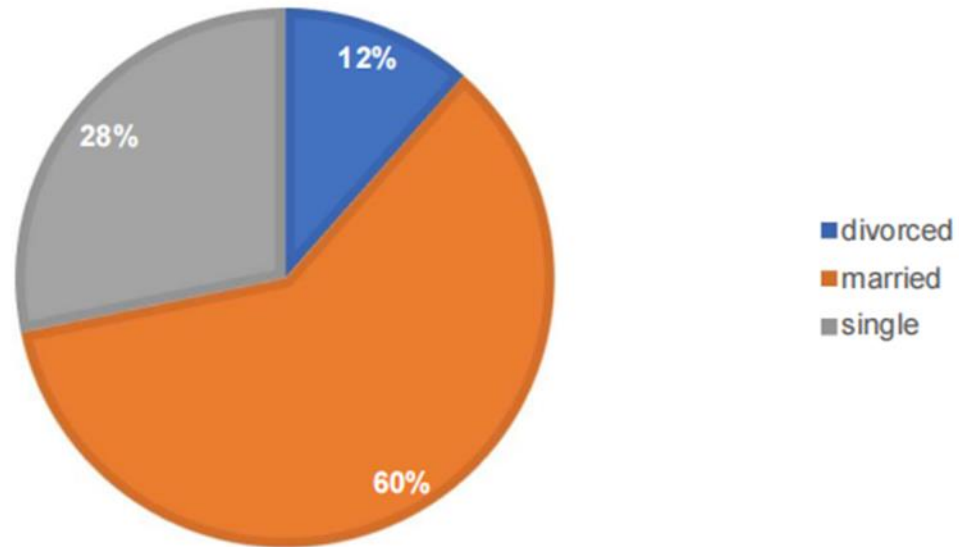
Mostly people are not even reached out previously for any product.



PART I : Segmented Univariate Analysis

Variable under consideration: Marital status

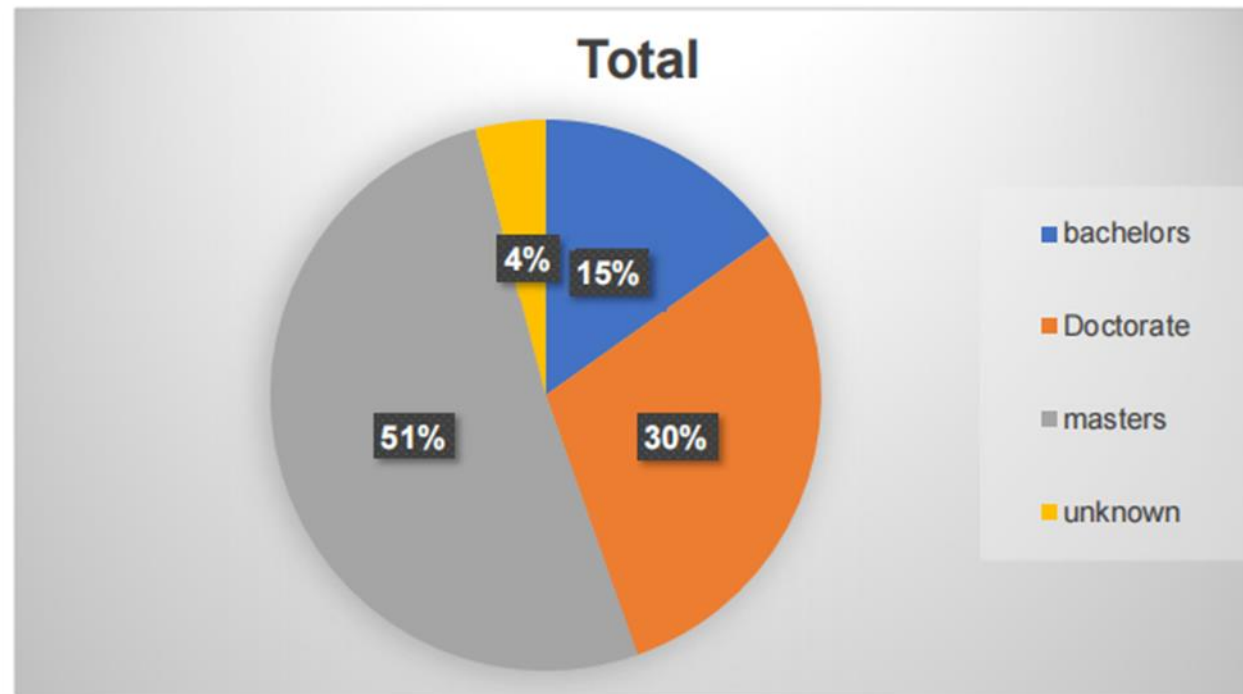
Most of the people have accounts are married.



PART I : Segmented Univariate Analysis

Variable under consideration: EDUCATION

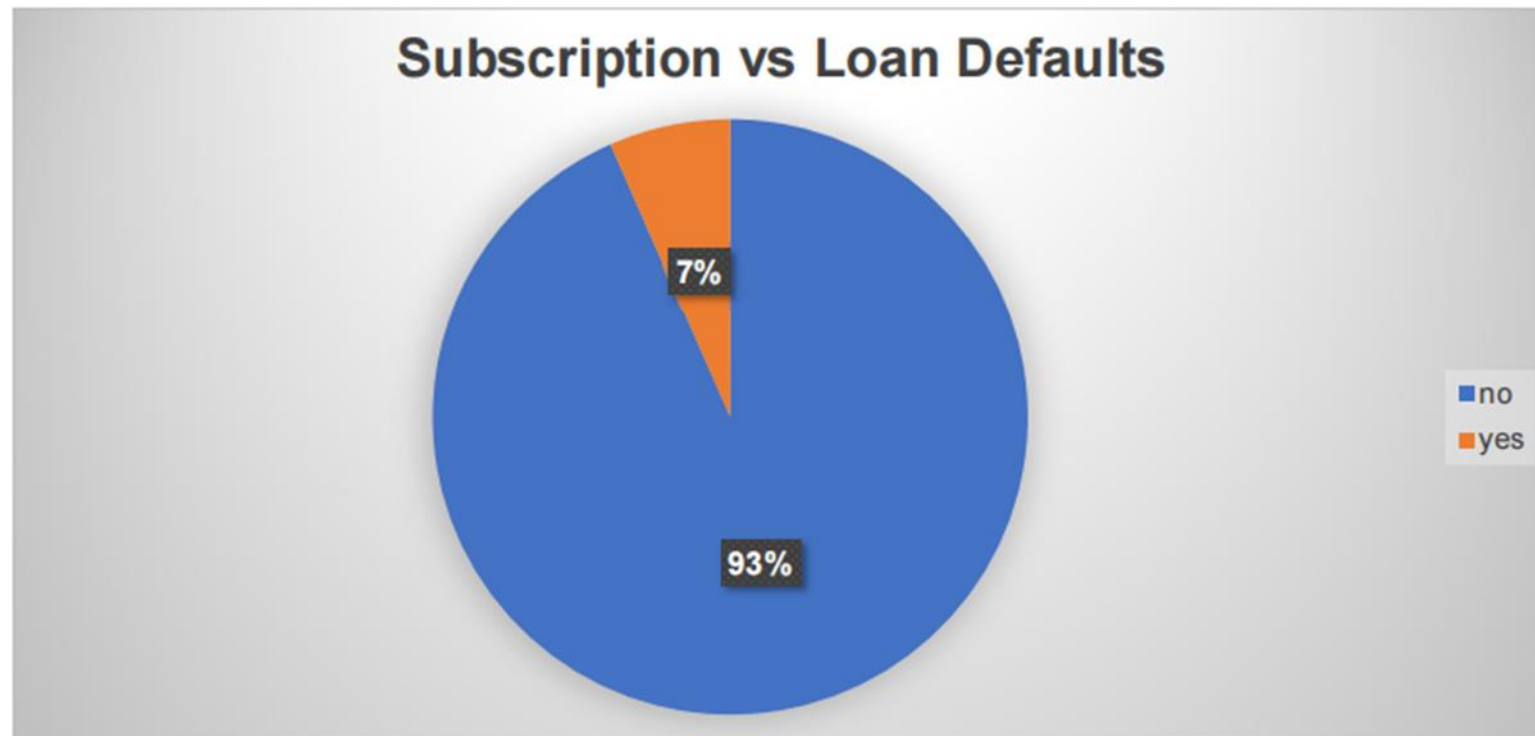
.Mostly people have done masters in this data set.



PART II : Bivariate Analysis

Variables under consideration: Subscription vs Loan Defaults

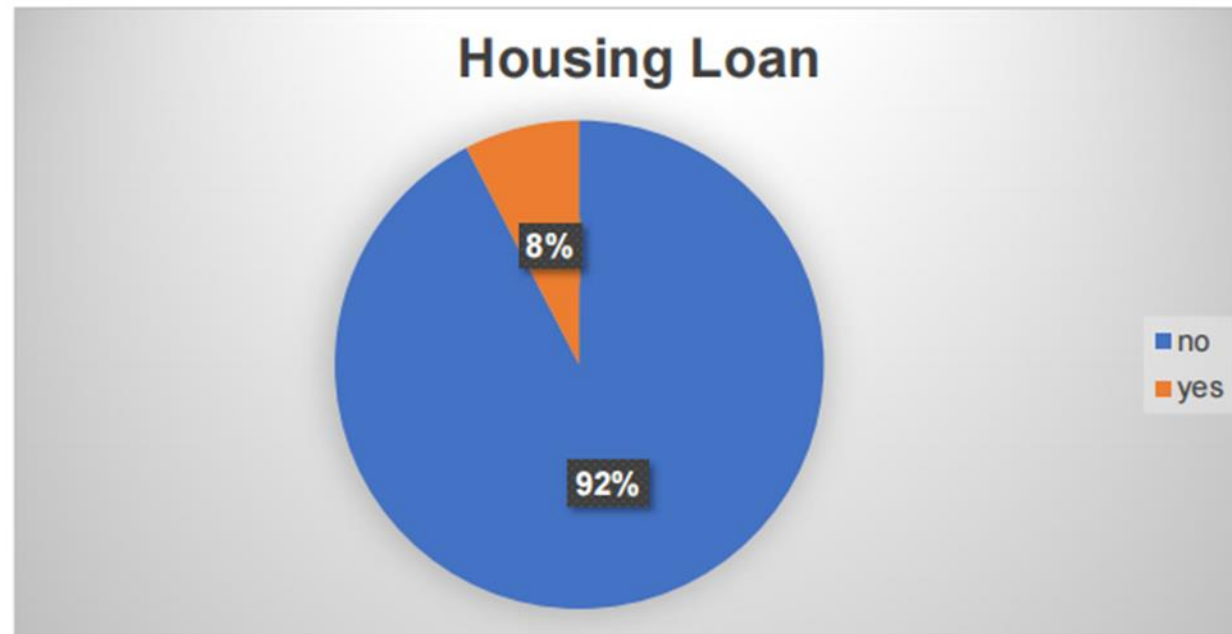
About 93% of people who has defaulted a loan said no to subscription.



PART II : Bivariate Analysis

Variables under consideration: Subscription vs Housing loan

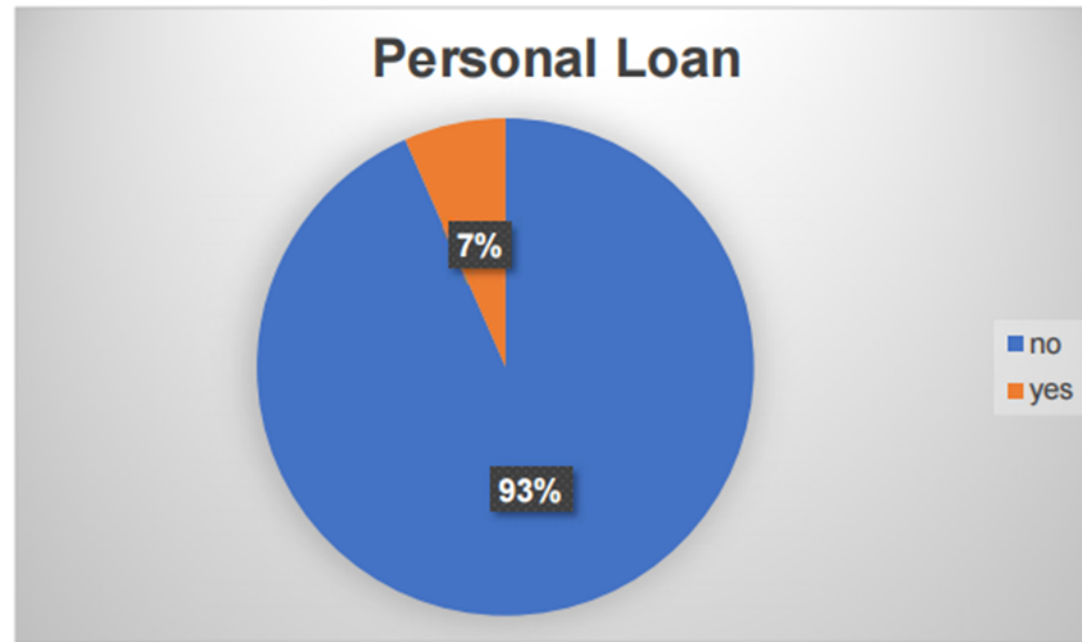
About 92% of people who has housing loan said no to subscription.



PART II : Bivariate Analysis

Variables under consideration: **Subscription vs Personal loan**

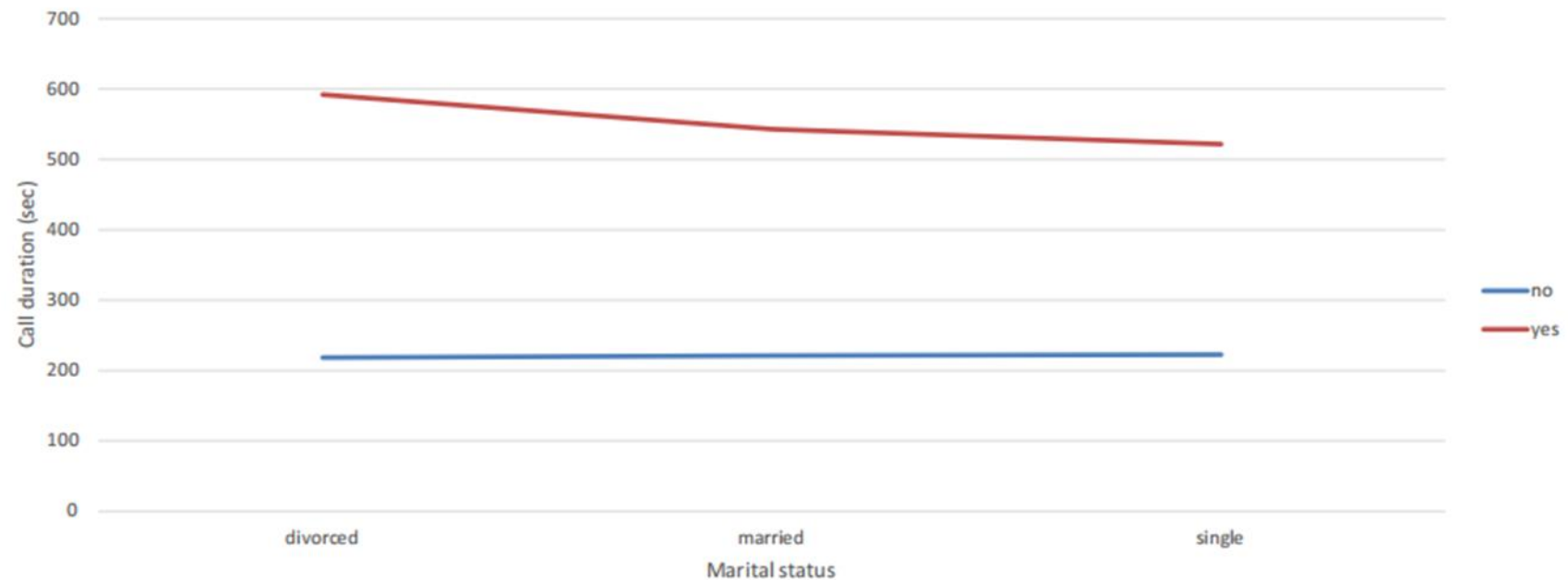
About 93% of people who has personal loan said no to subscription.



PART II : Bivariate Analysis

Variables under consideration: Subscription vs Call Duration (Sec) vs Marital status

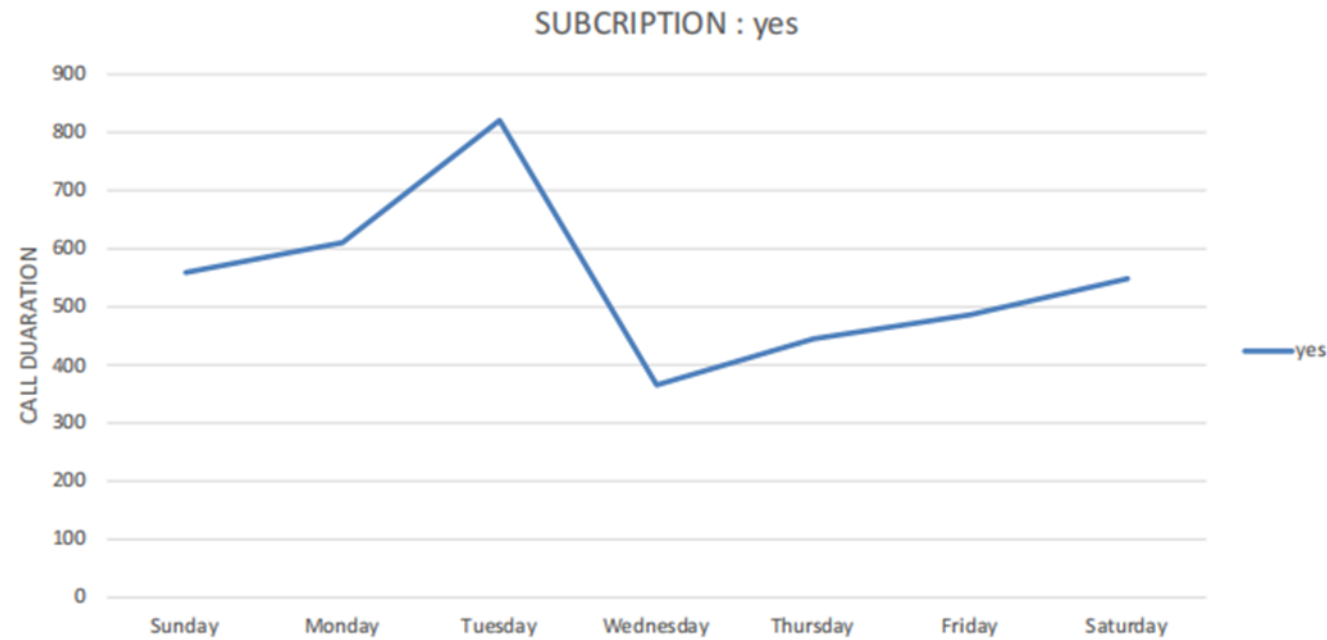
Divorced person most likely to say YES if the call duration is about 550 secs.



PART II : Bivariate Analysis

Variables under consideration: Subscription vs Call Duration (Sec) vs Weekdays

On Tuesdays average time take is more than 800 secs to yes for subscription.



PART II : Bivariate Analysis

Variables under consideration: Subscription vs Call Duration (Sec) vs Loan defaults vs Housing loan vs Personal loan

Housing loan and subscription has the most **negative** correlation
Call duration and subscription has the most **positive** correlation

	<i>Loan Default</i>	<i>Housing Loan</i>	<i>Personal Loan</i>	<i>Cash Balance</i>	<i>Subscription</i>	<i>Call Duration (sec)</i>
Loan Default	1					
Housing Loan	-0.00646543	1				
Personal Loan	0.076551084	0.040179212	1			
Cash Balance	-0.066651632	-0.068342761	-0.08395234	1		
Subscription	-0.020996912	-0.137419152	-0.067511799	0.053481884	1	
Call Duration (sec)	-0.009648145	0.005944999	-0.012347268	0.020993986	0.396286968	1

PART III: Major insights

Call Duration

- Minimum call duration should be 8.3 min to get the maximum subscriptions.
- On Tuesdays, the minimum call duration should be 13.3 min to get the subscriptions.
- As the call duration increase the chances to get the subscription also increases

Housing Loan

- The people with housing loans takes less subscription as compared with others as they have the most negative correlation.

Education:

More than half of the account holders have done "Masters"

Marital status:

60% of the account holders are "Married"

MONTH:

Mostly account holders are reached out in the month of "May"

AGE:

Maximum accounts are of the age from 30 yrs to 38 yrs.