

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 : Keerthi Rajan

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. These campaigns need to be cost efficient such that the bank not only increases their overall revenues but also the total profit.

Assignment Objective

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

PART I : Univariate Analysis

Marketing Campaign Optimization

Variable under consideration:

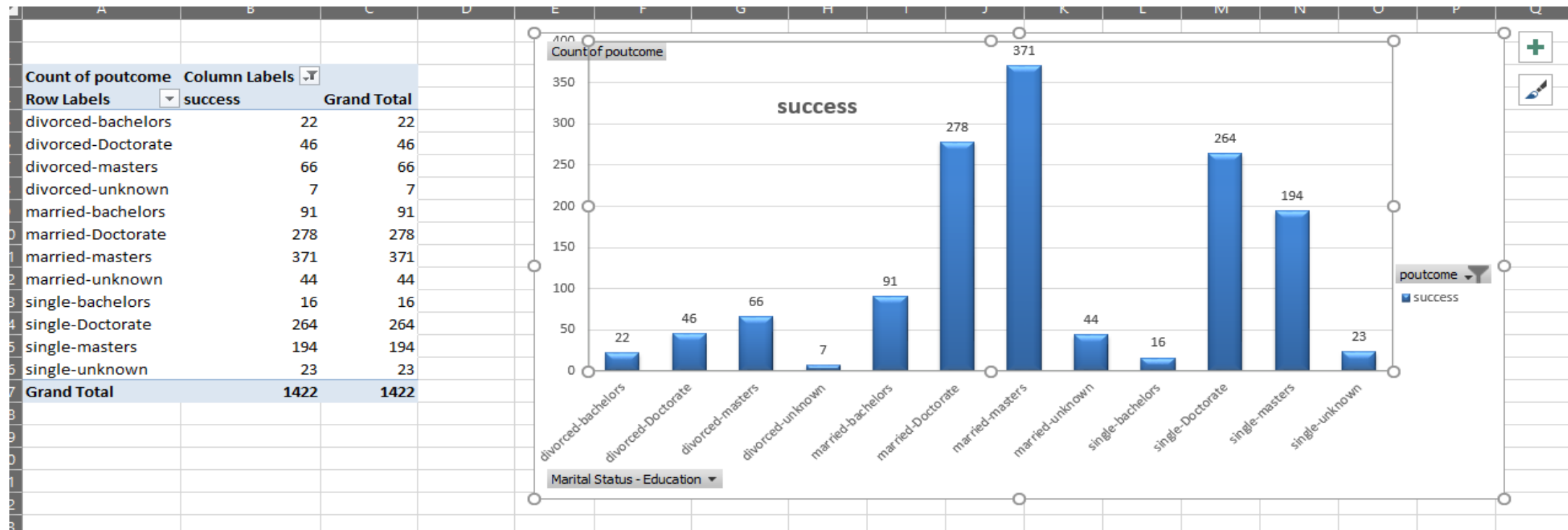
Data Cleaning

- -Cleaned the Age group column of the data set.
- -Removed Duplicates variables
- -Removed blank rows and column which gives no meaning to the problem
- -Created New Column by Merging Marital status and education which gives valuable insights

PART I: Univariate Analysis

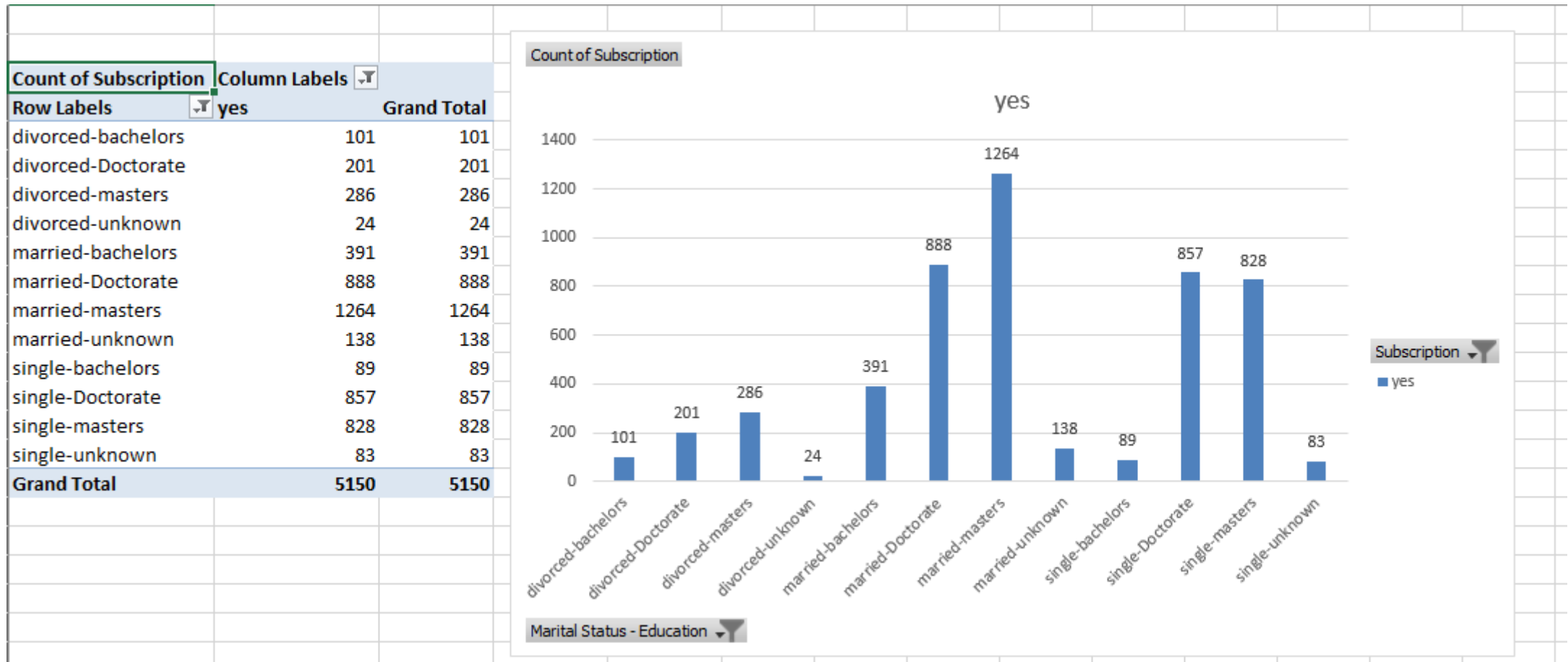
Marketing Campaign Optimisation

Variable under consideration: Married Masters Have high success outcome

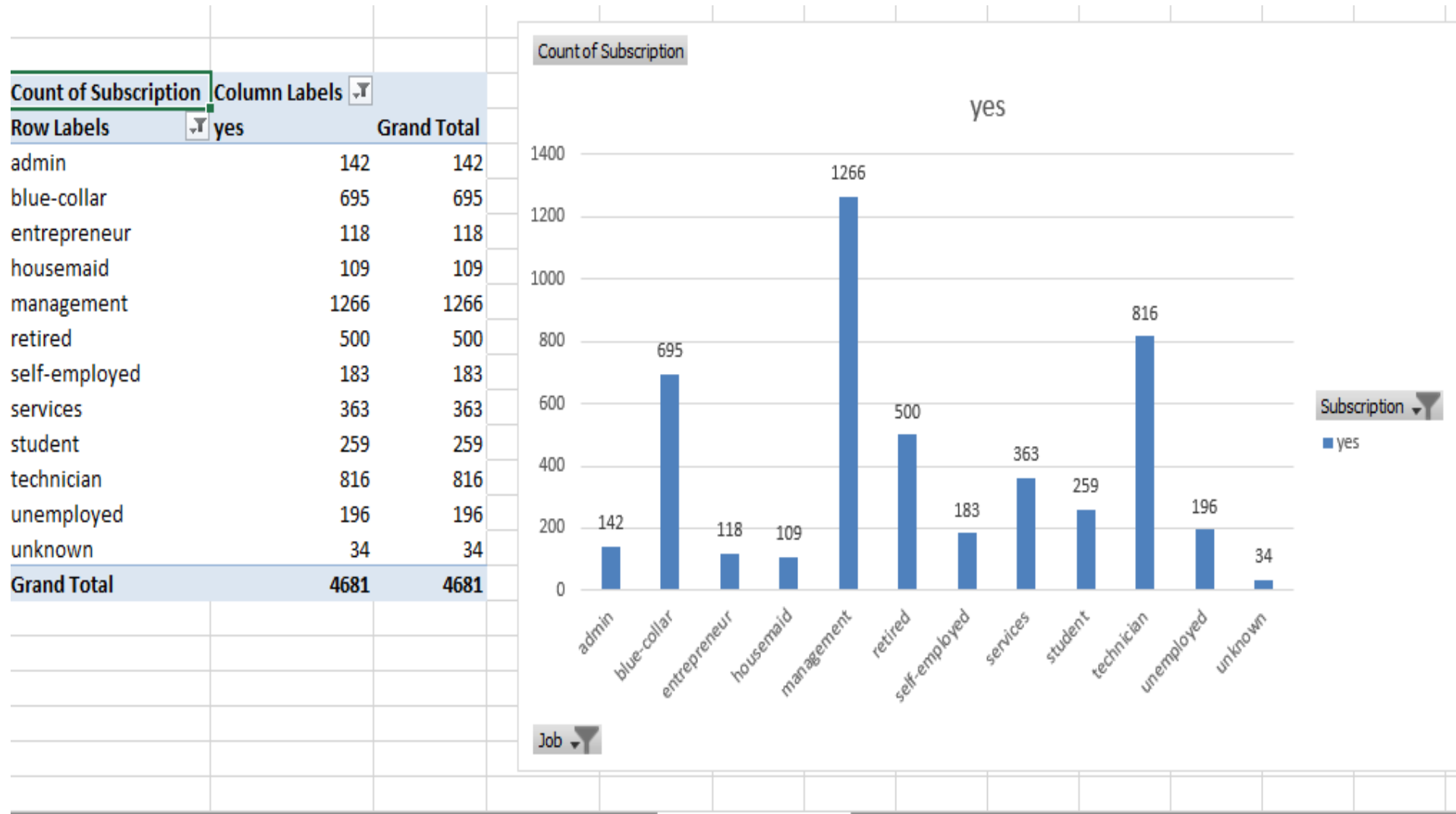


Univariate Analysis

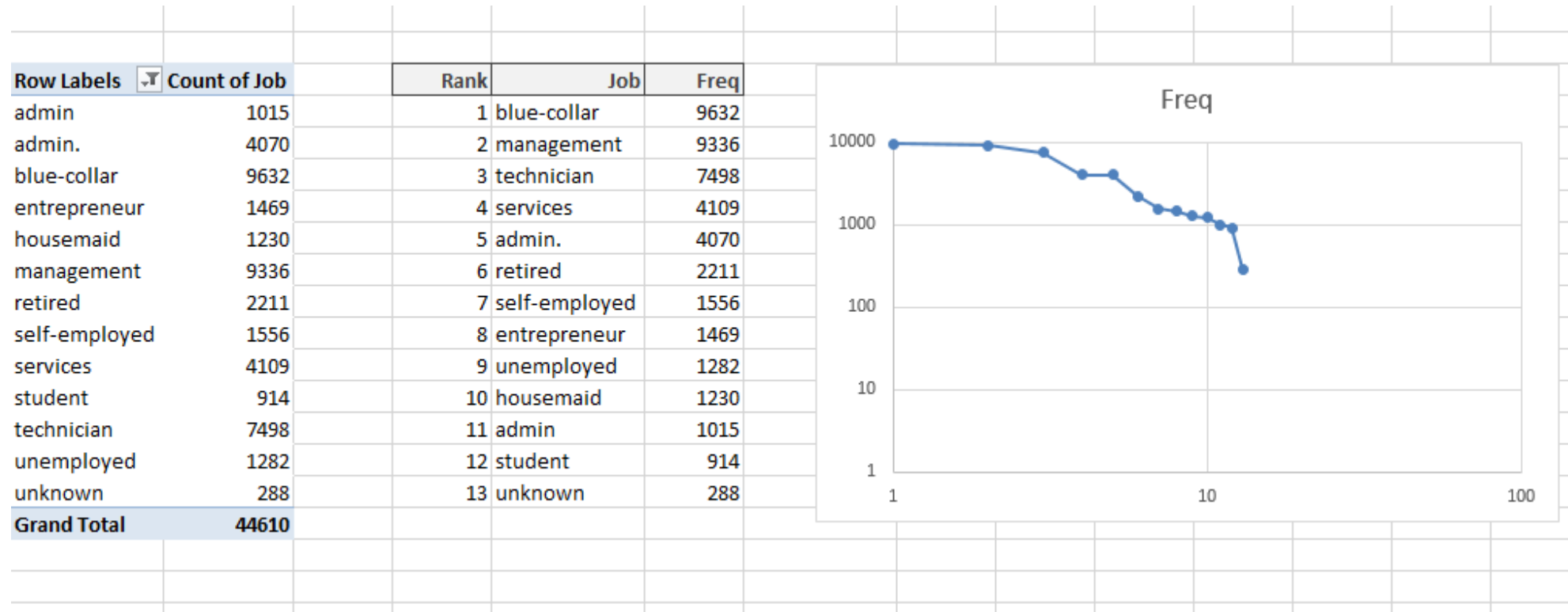
Married – Masters Have High subscription rate



Management have high subscription rate



Performing univariate analysis – Blue collar has high frequency rate



PART I : Univariate Analysis

Marketing Campaign Optimisation

Variable under consideration:

- -Performed an univariate analysis by selecting Job column and providing ranks based on the counts of each Job Category
- -Visualized using line chart with frequency and rank in Logarithmic axis

PART I : Univariate Analysis

Marketing Campaign Optimisation

Variable under consideration:

Age - Subscription

PART II : Bivariate Analysis

Marketing Campaign Optimisation

Variables under consideration:

A	B	C	D	E
	<i>Loan Default</i>	<i>Housing Loan</i>	<i>Personal Loan</i>	<i>Subscription</i>
Loan Default	1			
Housing Loan	-0.006468078	1		
Personal Loan	0.076552233	0.040170027	1	
Subscription	-0.020995779	-0.137424946	-0.067508012	1

- -Loan Default have negative correlation with Subscription , people who have loan default have not Subscribed
- -People who has personal loan have high loan default , as we see personal loan and loan default have high correlation
- -Personal loan and housing loan are positively correlated with each other
- -People who have loans have not subscribed at all

PART II : Bivariate Analysis

Marketing Campaign Optimisation

Variables under consideration:

- Subscription and Success outcome are highly correlated
- People who has loan default and other loans have very less success outcomes

	<i>Loan Default</i>	<i>Housing Loan</i>	<i>Personal Loan</i>	<i>Subscription</i>	<i>poutcome</i>
Loan Default	1				
Housing Loan	-0.006468078	1			
Personal Loan	0.076552233	0.040170027	1		
Subscription	-0.020995779	-0.137424946	-0.067508012	1	
poutcome	0.011198687	-0.135737834	-0.023512027	0.134976238	1

PART III: Optimisation Results

Marketing Campaign Optimisation

Budget is ₹1,50,000

Cost for 1 min is 10 rs.

710 rs. Is the maximum amount spent for a person

PART IV: Major insights

Marketing Campaign Optimisation

-People who are married and has masters degree resulted in high success of outcome , so it is good to target married masters people while doing marketing campaign.

- Loan Default have negative correlation with Subscription , people who have loan default have not Subscribed
- -People who has personal loan have high loan default , as we see personal loan and loan default have high correlation
- -Personal loan and housing loan are positively correlated with each other
- -People who have loans have not subscribed at all
- Subscription and Success outcome are highly correlated