

EDA REPORT

Report Overview

This report was created for the EDA of . data. It helps explore data to **understand the data and find scenarios for performing the analysis.**

Contents

Overview	2
Data Structures	2
Job Informations	2
Univariate Analysis	3
Descriptive Statistics	3
Numerical Variables	3
Categorical Variables	5
Normality Test	6
Bivariate Analysis	9
Compare Numerical Variables	9
Compare Categorical Variables	11
Multivariate Analysis	12
Correlation Analysis	12
Correlation Coefficient Matrix	12
Correlation Plot	13

Overview

Data Structures

division	metrics	value	division	metrics	value
size	observations	6,273	data type	numerics	2
size	variables	5	data type	integers	0
size	values	31,365	data type	factors/ordered	0
size	memory size (MB)	1	data type	characters	3
duplicated	duplicate observation	132	data type	Dates	0
missing	complete observation	6,273	data type	POSIXcts	0
missing	missing observation	0	data type	others	0
missing	missing variables	0			
missing	missing values	0			

Table 1: Data structures and types

Job Informations

division	metrics	value
dataset	dataset	.
dataset	dataset type	spec_tbl_df
dataset	target	not defied
job	samples	6,273 / 6,273 (100%)
job	created	2022-02-17 10:56:28
job	created by	dlookr

Table 2: Job informations

Univariate Analysis

Descriptive Statistics

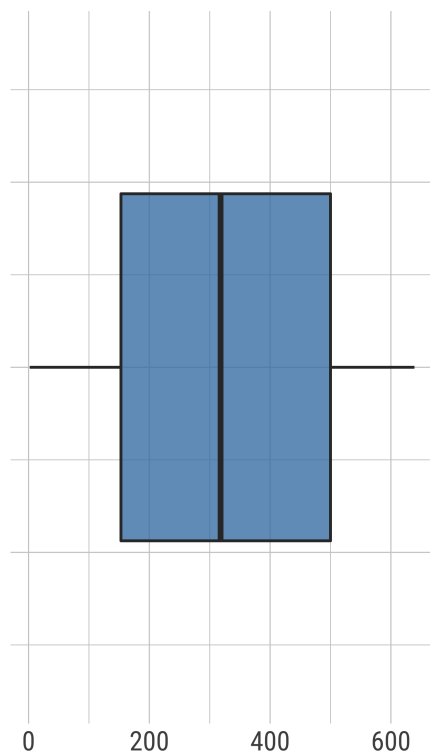
Numerical Variables

variables	missing	mean	sd	min	Q1	median	Q3	max
anon_ID	0	319.1	191.73	2	153	318	500	639
amount	0	25.3	2.59	1	25	25	25	100

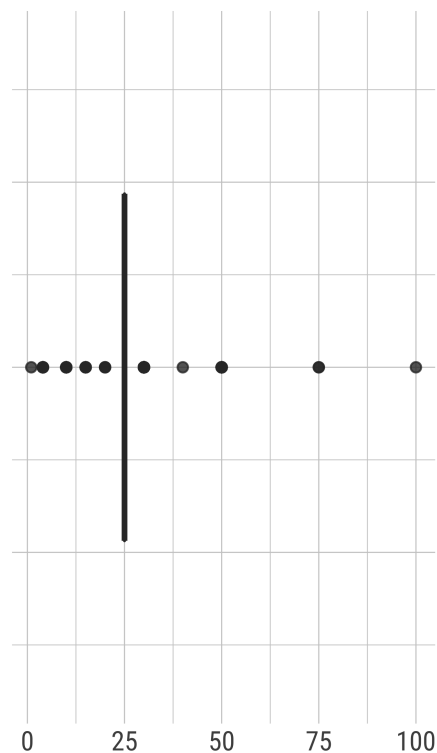
Table 3: Descriptive statistics of numerical variables

Distribution by numerical variables

anon_ID



amount



variables	data types	distinct	skewness	kurtosis	zero	negative	outlier
anon_ID	numeric	414	-0.02	-1.24	0	0	0
amount	numeric	11	7.78	193.47	0	0	400

Categorical Variables

variables	levels	observations	frequency	frequency(%)	rank
assistance_date	3/16/2020 13:35	6,273	13	0.21	1
assistance_date	3/16/2020 13:40	6,273	12	0.19	2
assistance_date	3/16/2020 13:20	6,273	11	0.18	3
assistance_date	5/26/2020 14:00	6,273	11	0.18	3
assistance_date	11/20/2020 12:00	6,273	10	0.16	5
assistance_date	12/22/2020 0:30	6,273	10	0.16	5
assistance_date	3/16/2020 13:25	6,273	10	0.16	5
assistance_date	10/27/2020 11:00	6,273	9	0.14	8
assistance_date	11/15/2019 16:00	6,273	8	0.13	9
assistance_date	12/22/2020 0:00	6,273	8	0.13	9
assistance_category	Food Pantry: Food Pantry Poundage	6,273	5,817	92.73	1
assistance_category	Food Pantry: Holiday Baskets	6,273	437	6.97	2
assistance_category	Food Pantry: Easter Outreach	6,273	19	0.30	3
unit	Pounds	6,273	6,161	98.21	1
unit	Dollars	6,273	99	1.58	2
unit	Boxes/Bags	6,273	13	0.21	3

Table 4: Top rank levels of categorical variables

The number of categorical(factor/ordered) variables is 0.

Normality Test

variable	min	Q1	median	Q3	max	skewness	kurtosis	balance
anon_ID	2	153	318	500	639	0.0	-1.2	Balanced
amount	1	25	25	25	100	7.8	193.5	Right-Skewed

Table 5: Descriptive statistics of numerical variables

anon_ID

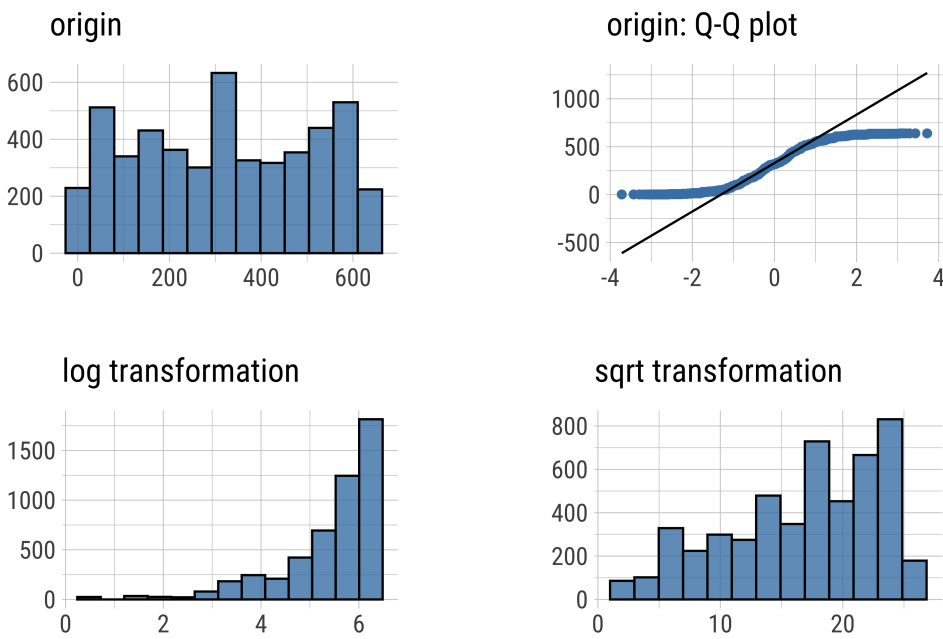
statistic	p_value	remark
0.94602	2.1097e-39	5000 samples

Table 6: Shapiro-Wilk normality test

type	skewness	kurtosis
original	-0.0171	1.7544
log transformation	-1.6633	5.9916
sqrt transformation	-0.5631	2.2879

Table 6: skewness and kurtosis

Normality Diagnosis Plot (x)



amount

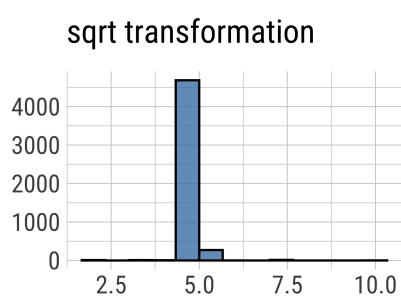
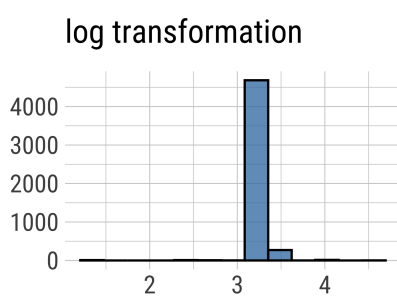
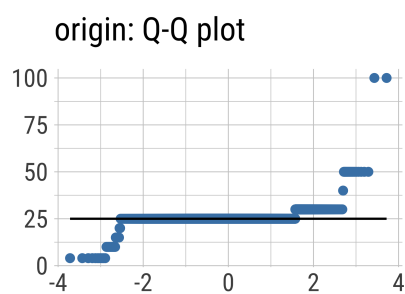
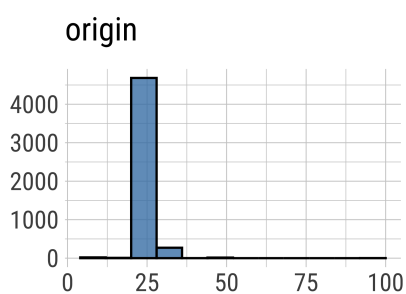
statistic	p_value	remark
0.17989	3.2593e-91	5000 samples

Table 6: Shapiro-Wilk normality test

type	skewness	kurtosis
original	10.5057	297.0612
log transformation	-8.2323	163.7251
sqrt transformation	0.6929	131.0159

Table 6: skewness and kurtosis

Normality Diagnosis Plot (x)



Bivariate Analysis

Compare Numerical Variables

first variable	second variable	correlation coefficient
anon_ID	amount	0.0219

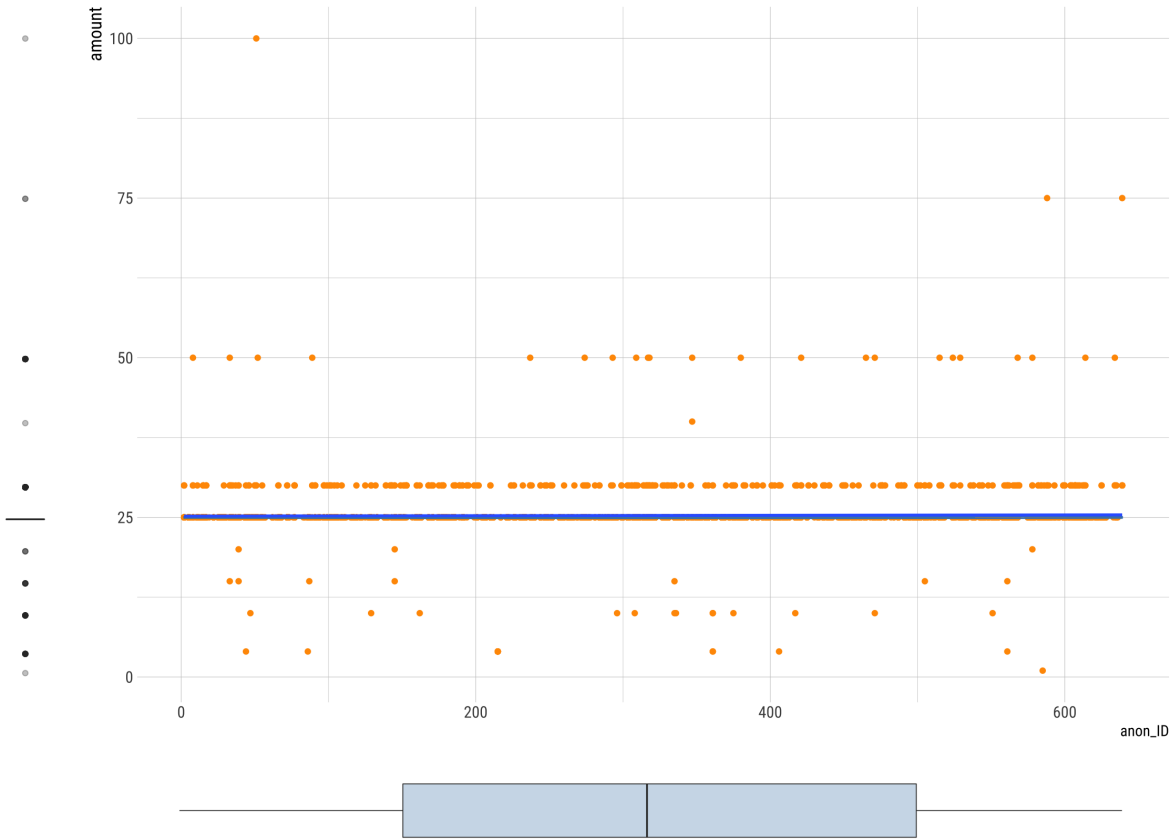
Table 7: Correlation coefficient

'anon_ID' vs 'amount'

first variable	second variable	r.squared	adj.r.squared	sigma	statistic	p.value	df
anon_ID	amount	0.0004797	0.0003203	191.7038	3.009804	0.0828114	1

Table 7: Summary of linear model

Scatterplots with anon_ID and amount



Compare Categorical Variables

The number of categorical variables is less than 2.

Multivariate Analysis

Correlation Analysis

Correlation Coefficient Matrix

first variable	second variable	
	anon_ID	amount
anon_ID	NA	0.022
amount	0.022	NA

Table 8: Matrix table of correlation coefficient

Correlation Plot

