

heart

Dataset Name: heart

Shape: 303 rows, 14 columns

Missing Values in Dataset:

Column Name	Missing Values
age	0
sex	0
cp	0
trestbps	0
chol	0
fbs	0
restecg	0
thalach	0
exang	0
oldpeak	0
slope	0
ca	0
thal	0
target	0

Dataset Description:

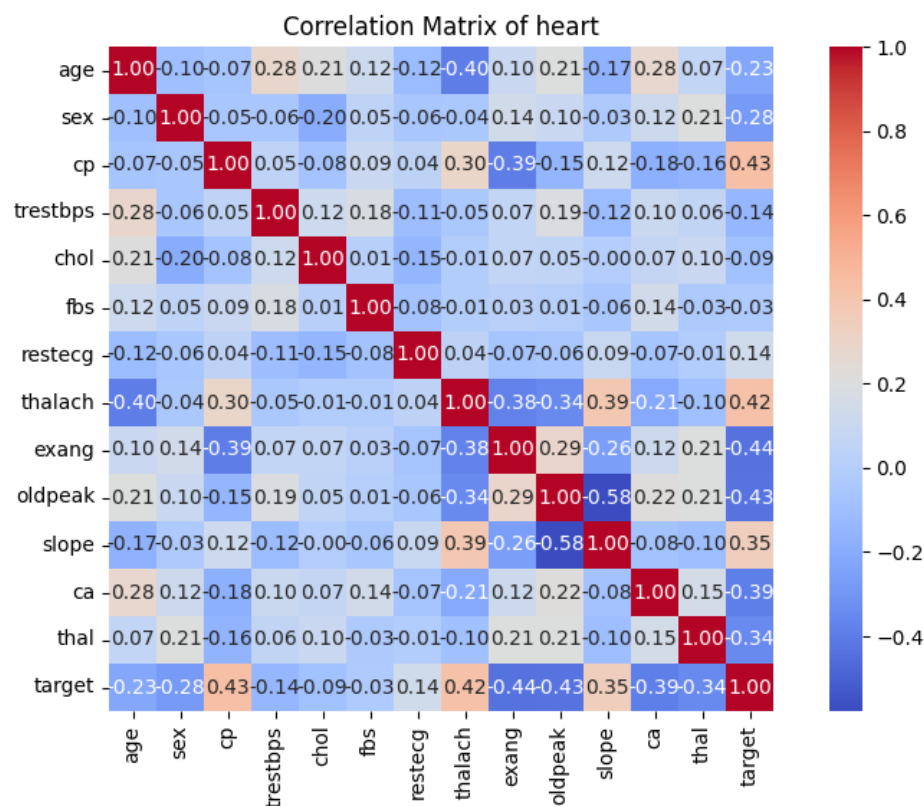
Statistic	age	sex	cp	trestbps
count	303.00	303.00	303.00	303.00
mean	54.37	0.68	0.97	131.62
std	9.08	0.47	1.03	17.54
min	29.00	0.00	0.00	94.00
25%	47.50	0.00	0.00	120.00
50%	55.00	1.00	1.00	130.00
75%	61.00	1.00	2.00	140.00
max	77.00	1.00	3.00	200.00

Statistic	chol	fbs	restecg	thalach
count	303.00	303.00	303.00	303.00
mean	246.26	0.15	0.53	149.65
std	51.83	0.36	0.53	22.91
min	126.00	0.00	0.00	71.00
25%	211.00	0.00	0.00	133.50
50%	240.00	0.00	1.00	153.00
75%	274.50	0.00	1.00	166.00
max	564.00	1.00	2.00	202.00

Statistic	exang	oldpeak	slope	ca
count	303.00	303.00	303.00	303.00
mean	0.33	1.04	1.40	0.73
std	0.47	1.16	0.62	1.02
min	0.00	0.00	0.00	0.00
25%	0.00	0.00	1.00	0.00
50%	0.00	0.80	1.00	0.00
75%	1.00	1.60	2.00	1.00
max	1.00	6.20	2.00	4.00

Statistic	thal	target
count	303.00	303.00
mean	2.31	0.54
std	0.61	0.50
min	0.00	0.00
25%	2.00	0.00
50%	2.00	1.00
75%	3.00	1.00
max	3.00	1.00

Correlation Plot:



Suggested Optimization Techniques and Models:

Suggested Optimization Techniques:

Linear Programming Result:

Invalid dimensions for linear programming. Check the constraints and objective function. -

Regression Analysis: Use when predicting a continuous outcome based on one or more predictors.

Regression Analysis Result:

Regression Coefficients: [0.0016867 -0.14878547 0.09728196 -0.00096128 -0.00021582
0.06155198

0.06083685 0.00224313 -0.18608597 -0.03906755 0.12357686 -0.14801956

-0.16777369], Intercept: 0.6610776656935633