Working With Dataset

Exploration Of Data

Team ID	PNT2022TMID04431
Project Name	Visualizing and Predicting Heart Diseases with an Interactive Dashboard

Dataset Link:

https://www.kaggle.com/datasets/rishidamarla/heart-disease-prediction.

About Dataset:

This is a kaggle dataset. It contains 14 fields. The goal of the dataset is to predict the presence of heart disease.

Dataset Exploration:

	Age	Sex	Chest pain	BP	Cholesterol	FBS over 1	EKG results	Max HR	Exercise a	ST depress	Slope of ST	Number o	Thallium	Heart Disease
1	Age	Sex	Chest pain	BP	Cholesterol	FBS over 1	EKG result	Max HR	Exercise a	ST depress	Slope of ST	Number o	Thallium	Heart Disease
2	70	1	4	130	322	0	2	109	0	2.4	2	3	3	Presence
3	67	0	3	115	564	0	2	160	0	1.6	2	0	7	Absence
4	57	1	2	124	261	0	0	141	0	0.3	1	0	7	Presence
5	64	1	4	128	263	0	0	105	1	0.2	2	1	7	Absence
6	74	0	2	120	269	0	2	121	1	0.2	1	1	3	Absence
7	65	1	4	120	177	0	0	140	0	0.4	1	0	7	Absence
8	56	1	3	130	256	1	2	142	1	0.6	2	1	6	Presence
9	59	1	4	110	239	0	2	142	1	1.2	2	1	7	Presence
10	60	1	4	140	293	0	2	170	0	1.2	2	2	7	Presence
11	63	0	4	150	407	0	2	154	0	4	2	3	7	Presence
12	59	1	4	135	234	0	0	161	0	0.5	2	0	7	Absence
13	53	1	4	142	226	0	2	111	1	0	1	0	7	Absence
14	44	1	3	140	235	0	2	180	0	0	1	0	3	Absence
15	61	1	1	134	234	0	0	145	0	2.6	2	2	3	Presence
16	57	0	4	128	303	0	2	159	0	0	1	1	3	Absence
17	71	0	4	112	149	0	0	125	0	1.6	2	0	3	Absence
18	46	1	4	140	311	0	0	120	1	1.8	2	2	7	Presence
19	53	1	4	140	203	1	2	155	1	3.1	3	0	7	Presence
20	64	1	1	110	211	0	2	144	1	1.8	2	0	3	Absence
21	40	1	1	140	199	0	0	178	1	1.4	1	0	7	Absence
22	67	1	4	120	229	0	2	129	1	2.6	2	2	7	Presence
23	48	1	2	130	245	0	2	180	0	0.2	2	0	3	Absence
24	43	1	4	115	303	0	0	181	0	1.2	2	0	3	Absence
25	47	1	4	112	204	0	0	143	0	0.1	1	0	3	Absence
26	54	0	2	132	288	1	2	159	1	0	1	1	3	Absence
27	48	0	3	130	275	0	0	139	0	0.2	1	0	3	Absence
28	46	0	4	138	243	0	2	152	1	0	2	0	3	Absence

Heart_Disease_Prediction

- Dataset contains 270 rows and 14 columns.
- There are no missing values in the dataset.

Explore data relationships

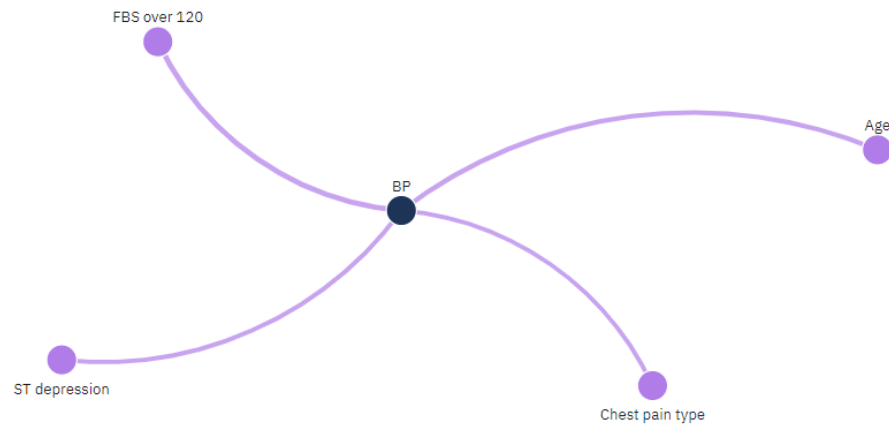Heart_Disease_Prediction.csv   Reset to original

🔍 BP   ✕   Edit diagram ⌄

FBS over 120

Age

BP

ST depression

Chest pain type

Relationship diagram ⓘ

10% ●—●   100%

1. BP is related to FBS over 120, ST depression, Chest Pain Type, Age over strength 10 % to 16 %
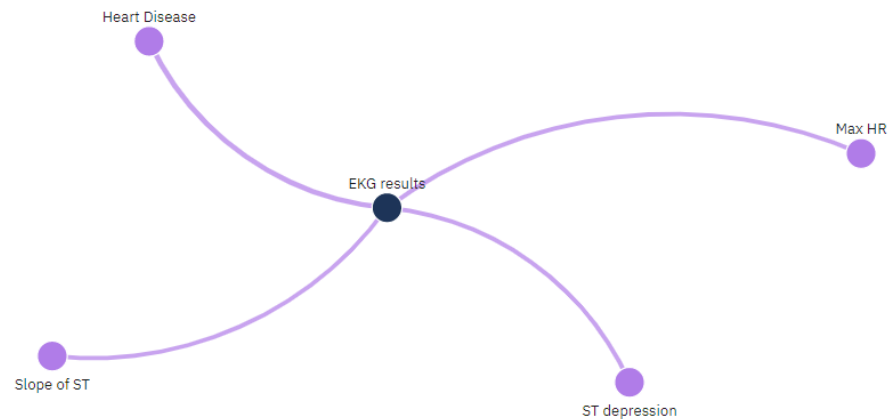
Explore data relationships

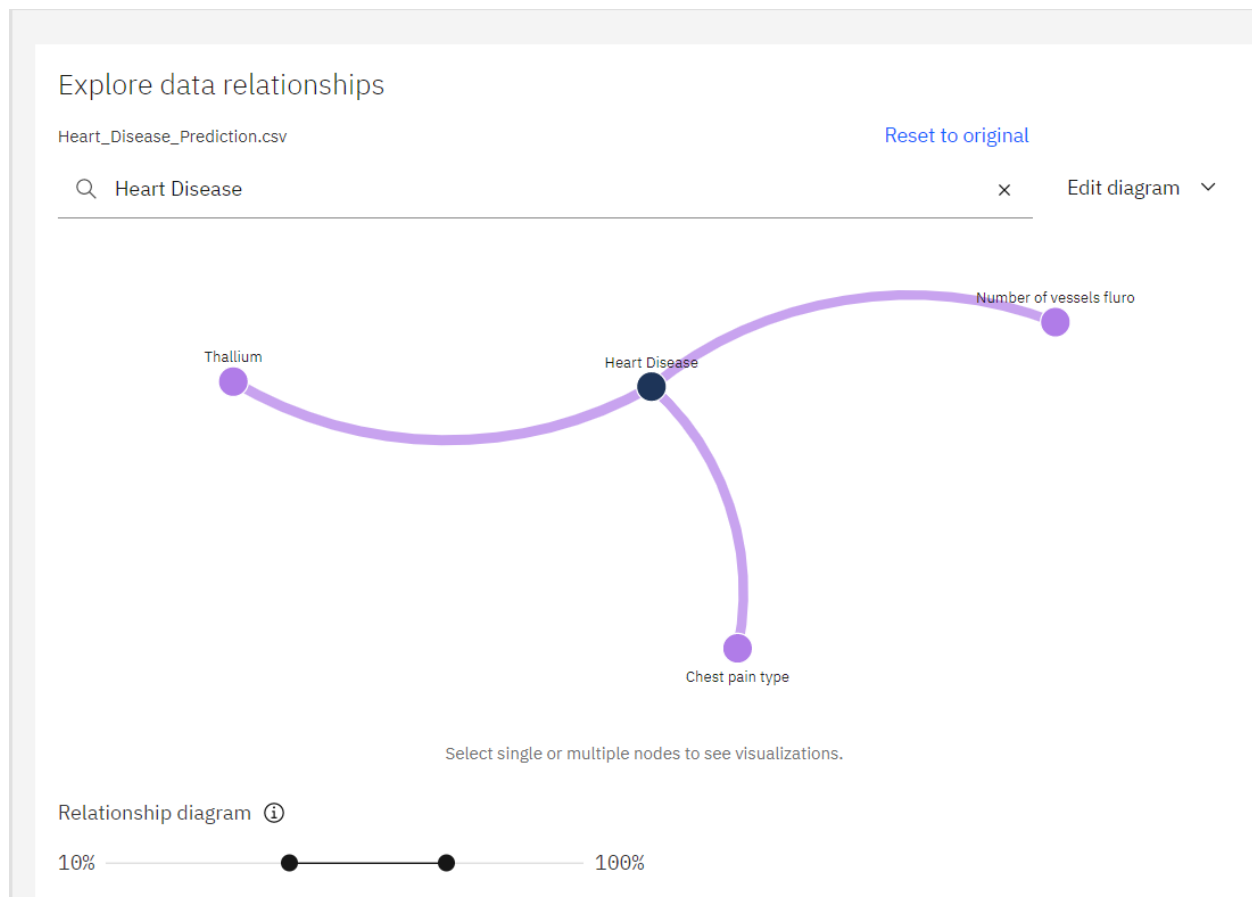Heart_Disease_Prediction.csv   Reset to original

Q EKG results   ✕   Edit diagram ⌄

Heart Disease

Max HR

EKG results

Slope of ST

ST depression

Relationship diagram ⓘ

10% ●–●——————————————— 100%

1. EKG results are related to Slope of ST, ST Depression, Max HR and Heart Disease.
2. As the values ST depression, Slope of ST and Max HR are calculated using EKG results, it is clear that the relationship diagram is correct.

Explore data relationships

Heart_Disease_Prediction.csv   Reset to original

🔍 Heart Disease   ✕   Edit diagram ⌄

Number of vessels fluro

Thallium   Heart Disease

Chest pain type

Select single or multiple nodes to see visualizations.

Relationship diagram ⓘ

10% ————————●————————●———— 100%

1. For the relationship strength over 45% to 75%, Heart disease is highly related to Thallium, Chest Pain Type and Number of vessels fluro.