|  |  |  |  |
| --- | --- | --- | --- |
| **Variable** | **Description** | **Type** | **Categories** |
| age | Age in years | int | - |
| ca | Number of major vessels colored by fluoroscopy | int | - |
| chol | Serum cholesterol (mg/dl) | con | - |
| trestbps | Resting blood pressure (mm Hg) | con | - |
| thalach | Max. heart rate achieved during thallium stress test | con | - |
| oldpeak | ST depression induced by exercise relative to rest | con | - |
| sex | Female or male | bin | 0-female, 1-male |
| fbs | Fasting blood sugar (< 120 mg/dl or > 120 mg/dl) | bin | 0-<120, 1>120 |
| exang | Exercise induced angina | bin | 0-no, 1-yes |
| cp | Chest pain type | cat | 1-typical angina |
|  |  |  | 2-atypical angina |
|  |  |  | 3-non-anginal pain |
|  |  |  | 4-asymptomatic |
| restecg | Resting electrocardiographic results | cat | 0-normal |
|  |  |  | 1-having ST-T wave abnormality |
|  |  |  | 2-showing probable or definite |
|  |  |  | left ventricular hypertrophy |
| slope | Slope of peak exercise ST segment | cat | 1-unsloping |
|  |  |  | 2-flat |
|  |  |  | 3-downsloping |
| thal | Thallium stress test result | cat | 1-normal |
|  |  |  | 2-fixed defect |
|  |  |  | 3-reversible defect |
| target | The presence of narrowing vessel | bin | 0-presence, 1-absence |

Variables of the heart disease patients in the dataset; the last row (target) is the response variable; the type column indicates whether a variable is binary (bin), integer (int), categorical (cat), or continuous (con); categories were shown for binary and categorical variables.