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In [1]: import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns

In [2]: df = pd.read_csv("D:\Vinayak\Main Flow intenhip\heart_failure_clinical_records_dataset.csv")
df.head()

Out[2]:
```

	age	anaemia	creatinine_phosphokinase	diabetes	ejection_fraction	high_blood_pressure	platelets	serum_creatinine	serum_sodium	sex	smoking	time	DEATH_EVENT	
0	75.0	0		582	0	20	1	265000.00	1.1	130	1	0	4	1
1	55.0	0		7861	0	38	0	263358.03	1.1	136	1	0	6	1
2	65.0	0		146	0	20	0	162000.00	1.3	129	1	1	7	1
3	50.0	1		111	0	20	0	210000.00	1.9	137	1	0	7	1
4	65.0	1		160	1	20	0	327000.00	2.7	116	0	0	8	1

```
In [3]: df.shape

Out[3]: (299, 13)

In [4]: df.columns

Out[4]: Index(['age', 'anaemia', 'creatinine_phosphokinase', 'diabetes',
          'ejection_fraction', 'high_blood_pressure', 'platelets',
          'serum_creatinine', 'serum_sodium', 'sex', 'smoking', 'time',
          'DEATH_EVENT'],
          dtype='object')

In [5]: df.info()

<class 'pandas.core.frame.DataFrame'>
RangeIndex: 299 entries, 0 to 298
Data columns (total 13 columns):
#   Column                Non-Null Count  Dtype
---  --
0   age                   299 non-null   float64
1   anaemia               299 non-null   int64
2   creatinine_phosphokinase 299 non-null   int64
3   diabetes              299 non-null   int64
4   ejection_fraction     299 non-null   int64
5   high_blood_pressure    299 non-null   int64
6   platelets             299 non-null   float64
7   serum_creatinine       299 non-null   float64
8   serum_sodium          299 non-null   int64
9   sex                   299 non-null   int64
10  smoking               299 non-null   int64
11  time                  299 non-null   int64
12  DEATH_EVENT           299 non-null   int64
dtypes: float64(3), int64(10)
memory usage: 38.5 KB

In [6]: df.describe()

Out[6]:
```

	age	anaemia	creatinine_phosphokinase	diabetes	ejection_fraction	high_blood_pressure	platelets	serum_creatinine	serum_sodium	sex	smoking	time	DEATH_EVENT
count	299.000000	299.000000	299.000000	299.000000	299.000000	299.000000	299.000000	299.000000	299.000000	299.000000	299.000000	299.000000	299.000000
mean	60.833893	0.431438	581.839465	0.418060	38.083612	0.351171	263358.029264	1.39388	136.625418	0.648829	0.32107	130.260870	
std	11.894809	0.496107	970.287881	0.494067	11.834841	0.478136	97804.236869	1.03451	4.412477	0.478136	0.46767	77.614208	
min	40.000000	0.000000	23.000000	0.000000	14.000000	0.000000	25100.000000	0.500000	113.000000	0.000000	0.000000	4.000000	
25%	51.000000	0.000000	118.500000	0.000000	30.000000	0.000000	212500.000000	0.900000	134.000000	0.000000	0.000000	73.000000	
50%	60.000000	0.000000	250.000000	0.000000	38.000000	0.000000	262000.000000	1.100000	137.000000	1.000000	0.000000	115.000000	
75%	70.000000	1.000000	582.000000	1.000000	45.000000	1.000000	303500.000000	1.400000	140.000000	1.000000	1.000000	203.000000	
max	95.000000	1.000000	7861.000000	1.000000	80.000000	1.000000	850000.000000	9.400000	148.000000	1.000000	1.000000	285.000000	

