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diabetes.ipynb
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1 import pandas as pd
2 import seaborn as sb
3 import numpy as np
4 import matplotlib.pyplot as plt

[] | dbts = pd.read_csv('https://github.com/VBI-Foundation/Dataset/raw/main/Diabetes.csv')

[] | dbts.head()

pregnancies glucose diastolic triceps insulin bmi dpf age diabetes
0      6      148      72      35      0  33.6  0.627  50      1
1      1      85      66      29      0  26.6  0.359  31      0
2      8     183      64      0      0  23.3  0.672  32      1
3      1      89      66      23     94  28.1  0.167  21      0
4      0     137      40      36     88  43.1  2.288  33      1

[] | dbts.info()

<class 'pandas.core.frame.DataFrame'>
RangeIndex: 768 entries, 0 to 767
Data columns (total 9 columns):
 #   Column      Non-Null Count  Dtype
---  -
 0  pregnancies  768 non-null    int64
 1  glucose      768 non-null    float64
 2  diastolic    768 non-null    float64
 3  triceps      768 non-null    int64
 4  insulin      768 non-null    float64
 5  bmi          768 non-null    float64
 6  dpf          768 non-null    float64
 7  age          768 non-null    int64
 8  diabetes     768 non-null    int64
dtypes: float64(2), int64(7)
memory usage: 54.1 KB

[] | dbts.isnull()

pregnancies glucose diastolic triceps insulin bmi dpf age diabetes
0      False      False      False      False      False      False      False      False
1      False      False      False      False      False      False      False      False
2      False      False      False      False      False      False      False      False
3      False      False      False      False      False      False      False      False
4      False      False      False      False      False      False      False      False
...
763     False     False     False     False     False     False     False     False
764     False     False     False     False     False     False     False     False
765     False     False     False     False     False     False     False     False
766     False     False     False     False     False     False     False     False
767     False     False     False     False     False     False     False     False
768 rows x 9 columns

[] | dbts.nunique()

pregnancies      17
glucose          136
diastolic         47
triceps           51
insulin          186
bmi              248
dpf              517
age              52
diabetes          2
dtype: int64

[] | dbts.columns

Index(['pregnancies', 'glucose', 'diastolic', 'triceps', 'insulin', 'bmi', 'dpf', 'age', 'diabetes'],
      dtype='object')

[] | y = dbts['diabetes']

[] | x = dbts[['pregnancies', 'glucose', 'diastolic', 'triceps', 'insulin', 'bmi', 'dpf', 'age']]

[] | #from sklearn.linear_model import LogisticRegression

[] | #model = LogisticRegression(max_iter=200)

[] | from sklearn.ensemble import RandomForestClassifier
2 model = RandomForestClassifier()

[] | model.fit(x, y)

RandomForestClassifier()

[] | y_pred = model.predict(x)

[] | from sklearn.metrics import accuracy_score

[] | accuracy_score(y, y_pred)

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