<https://www.kaggle.com/code/kanncaa1/heart-attack-analysis-prediction/notebook>

<https://www.kaggle.com/code/kanncaa1/data-science-machine-learning-projects-python>

# <https://www.kaggle.com/code/kanncaa1/machine-learning-tutorial-for-beginners>

**Content:**

1. Introduction to Python:
   1. Matplotlib
   2. Dictionaries
   3. Pandas
   4. Logic, control flow and filtering
   5. Loop data structures
2. Python Data Science Toolbox:
   1. User defined function
   2. Scope
   3. Nested function
   4. Default and flexible arguments
   5. Lambda function
   6. Anonymous function
   7. Iterators
   8. List comprehension
3. Cleaning Data
   1. Diagnose data for cleaning
   2. Explotary data analysis
   3. Visual exploratory data analysis
   4. Tidy data
   5. Pivoting data
   6. Concatenating data
   7. Data types
   8. Missing data and testing with assert
4. Pandas Foundation
   1. Review of pandas
   2. Building data frames from scratch
   3. Visual exploratory data analysis
   4. Statistical explatory data analysis
   5. Indexing pandas time series
   6. Resampling pandas time series
5. Manipulating Data Frames with Pandas
   1. Indexing data frames
   2. Slicing data frames
   3. Filtering data frames
   4. Transforming data frames
   5. Index objects and labeled data
   6. Hierarchical indexing
   7. Pivoting data frames
   8. Stacking and unstacking data frames
   9. Melting data frames
   10. Categoricals and groupby
6. Data Visualization
   1. Seaborn: <https://www.kaggle.com/kanncaa1/seaborn-for-beginners>
   2. Bokeh: <https://www.kaggle.com/kanncaa1/interactive-bokeh-tutorial-part-1>
   3. Bokeh: <https://www.kaggle.com/kanncaa1/interactive-bokeh-tutorial-part-2>
7. Statistical Thinking
   1. <https://www.kaggle.com/kanncaa1/basic-statistic-tutorial-for-beginners>
8. [Machine Learning](https://www.kaggle.com/code/kanncaa1/machine-learning-tutorial-for-beginners#1)
   1. [Supervised Learning](https://www.kaggle.com/code/kanncaa1/machine-learning-tutorial-for-beginners#2)
      1. [EDA(Exploratory Data Analysis)](https://www.kaggle.com/code/kanncaa1/machine-learning-tutorial-for-beginners#3)
      2. [K-Nearest Neighbors (KNN)](https://www.kaggle.com/code/kanncaa1/machine-learning-tutorial-for-beginners#4)
      3. [Regression](https://www.kaggle.com/code/kanncaa1/machine-learning-tutorial-for-beginners#5)
      4. [Cross Validation (CV)](https://www.kaggle.com/code/kanncaa1/machine-learning-tutorial-for-beginners#6)
      5. [ROC Curve](https://www.kaggle.com/code/kanncaa1/machine-learning-tutorial-for-beginners#7)
      6. [Hyperparameter Tuning](https://www.kaggle.com/code/kanncaa1/machine-learning-tutorial-for-beginners#8)
      7. [Pre-procesing Data](https://www.kaggle.com/code/kanncaa1/machine-learning-tutorial-for-beginners#9)
   2. [Unsupervised Learning](https://www.kaggle.com/code/kanncaa1/machine-learning-tutorial-for-beginners#10)
      1. [Kmeans Clustering](https://www.kaggle.com/code/kanncaa1/machine-learning-tutorial-for-beginners#11)
      2. [Evaluation of Clustering](https://www.kaggle.com/code/kanncaa1/machine-learning-tutorial-for-beginners#12)
      3. [Standardization](https://www.kaggle.com/code/kanncaa1/machine-learning-tutorial-for-beginners#13)
      4. [Hierachy](https://www.kaggle.com/code/kanncaa1/machine-learning-tutorial-for-beginners#14)
      5. [T - Distributed Stochastic Neighbor Embedding (T - SNE)](https://www.kaggle.com/code/kanncaa1/machine-learning-tutorial-for-beginners#15)
      6. [Principle Component Analysis (PCA)](https://www.kaggle.com/code/kanncaa1/machine-learning-tutorial-for-beginners#16)
9. Deep Learning
   1. <https://www.kaggle.com/kanncaa1/deep-learning-tutorial-for-beginners>
10. Time Series Prediction
    1. <https://www.kaggle.com/kanncaa1/time-series-prediction-tutorial-with-eda>
11. Deep Learning with Pytorch
    1. Artificial Neural Network: <https://www.kaggle.com/kanncaa1/pytorch-tutorial-for-deep-learning-lovers>
    2. Convolutional Neural Network: <https://www.kaggle.com/kanncaa1/pytorch-tutorial-for-deep-learning-lovers>
    3. Recurrent Neural Network: <https://www.kaggle.com/kanncaa1/recurrent-neural-network-with-pytorch>