Total 3 Applications

a)

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Kaiyu Yan 197005416

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b). Financial Applications

(1) Credit Risk prediction

(2) Forecasting GDP per capita

(3)Housing Prediction

c)

(1) <https://blackboard.rutgers.edu/webapps/blackboard/execute/content/file?cmd=view&content_id=_2104000_1&course_id=_122290_1&framesetWrapped=true> From Fixed Income Course

(2) <https://www.kaggle.com/fernandol/countries-of-the-world>

(3)

data download <https://github.com/Shitao-zz/Kaggle-House-Prices-Advanced-Regression-Techniques/tree/master/input>

d) import numpy as np

import pandas as pd

import seaborn as sns

from matplotlib import pyplot as plt

from sklearn.preprocessing import LabelEncoder

from sklearn.model\_selection import train\_test\_split

from sklearn.linear\_model import LinearRegression

from sklearn.tree import DecisionTreeRegressor

from sklearn.ensemble import RandomForestRegressor

from sklearn.metrics import mean\_squared\_error, mean\_squared\_log\_error

import pandas as pd

import matplotlib.pyplot as plt

import seaborn as sns

import numpy as np

from scipy.stats import norm

from sklearn.preprocessing import StandardScaler

from scipy import stats

import warnings

from sklearn.model\_selection import train\_test\_split

from scipy.stats import skew

from scipy.stats.stats import pearsonr

import numpy as np

import pandas as pd

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e)www. Kaggle.com