File : stu_math.csv

```
#Import Libraries
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
# load datasets for Math subject
df = pd.read_csv("student-mat.csv", sep=';')

df['final_grade'] = 'na'
df.loc[(df.G3 >= 15) & (df.G3 <= 20), 'final_grade'] = 'good'
df.loc[(df.G3 >= 10) & (df.G3 <= 14), 'final_grade'] = 'fair'
df.loc[(df.G3 >= 0) & (df.G3 <= 9), 'final_grade'] = 'poor'
df.head(5)

# look for missing values
df.isnull().any()
df.to_csv("STUDENT_dataset_Final.csv")

# create dataframe dfd for classification
dfd = df.copy()
dfd = dfd.drop([ 'G3'], axis=1)
dfd.head()

# label encode final_grade
from sklearn import preprocessing
en = preprocessing.LabelEncoder()
dfd.final_grade = en.fit_transform(dfd.final_grade)
dfd.head()
```