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In [ ]: import pandas as pd
import numpy as np
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In [ ]: features = ["Age", "Workclass", "fnlwgt", "Education", "Education-Num", "Marital Status", "Occupation", "Relationship",
                  "Race", "Sex", "Capital Gain", "Capital Loss", "Hours per week", "Country", "Target"]

df = pd.read_csv('adult.data', names=features)
df
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In [ ]: gender_count = df['Sex'].value_counts()
print(gender_count)
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In [ ]: df[["Sex", "Age"]].groupby("Sex").mean().head(1)
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In [ ]: num_German = len(df[df['Country'] == ' Germany'])
all_citizens = len(df)
print('German citizens is: ', num_German / all_citizens)
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In [ ]: more_than50 = df[df['Target'] == '>50K']['Age']
print('Mean of those whose salary is more than 50K: ', round(np.mean(more_than50), 2))
print('Standard Deviation of those whose salary is more than 50K: ', round(np.std(more_than50), 2))

less_than50 = df[df['Target'] == '<=50K']['Age']
print('\nMean of those whose salary is less than 50K: ', round(np.mean(less_than50), 2))
print('Standard Deviation of those whose salary is less than 50K: ', round(np.std(less_than50), 2))
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In [ ]: high_income_education = ['Bachelors', 'Prof-school', 'Assoc-acdm', 'Assoc-voc', 'Masters', 'Doctorate']
high_income_education_check = df.loc[df['Target'] == '>50K', 'Education'].isin(high_income_education).all()
print(high_income_education_check)
```