```python
import numpy as np
import pandas as pd


np.random.seed(10

normal_incomes = np.random.lognormal(10, 0.5, 1000

outliers = [10000000, 20000000


values = np.concatenate([normal_incomes, outliers
df = pd.DataFrame({"income": values


Q1 = df["income"].quantile(0.25
Q3 = df["income"].quantile(0.75
IQR = Q3 - Q1
lower_limit = Q1 - 1.5 * IQR
upper_limit = Q3 + 1.5 * IQR




mean_val = df["income"].mean
std_val = df["income"].std
df["z_score"] = (df["income"] - mean_val) / std_val




df["income_raw"] = df["income


df["income_capped"] = df["income"].clip(lower=lower_limit,
upper=upper_limit


df["income_log"] = np.log1p(df["income


print(f"IQR Upper Limit: {upper_limit:.2f
print(f"Outliers found (IQR): {len(df[df['income'] >
[upper_limit
print(f"Outliers found (Z-Score > 3): {len(df[df['z_score'].abs()
[> 3


print("\nLast 2 rows (The Outliers
print(df[["income_raw", "income_capped", "income_log"]].tail(2
```