

```

import pandas as pd

("df_raw = pd.read_csv("day15_real_dataset_large.csv

:(def clean_data_project(df_raw
    ()df = df_raw.copy
        Types #
("df["age"] = pd.to_numeric(df["age"], errors="coerce
    , ["df["income"] = pd.to_numeric(df["income"]
        ("errors="coerce
    , ["df["signup_time"] = pd.to_datetime(df["signup_time"]
        ("errors="coerce
            Missing #
("df["age_missing"] = df["age"].isna().astype(int
    ()df["age"] = df["age"].fillna(df["age"].median
("df["income_missing"] = df["income"].isna().astype(int
    ()df["income"] = df["income"].fillna(df["income"].median
        Outliers #
("df["income"] =
((df["income"].clip(upper=df["income"].quantile(0.99
            Strings and dates #
    ()df["city"] = df["city"].str.strip().str.lower
("df["signup_time"] = df["signup_time"].dt.tz_localize("UTC
                return df

} = cleaning_decisions
income_cap_99": "Cap income at 99th percentile to reduce"
    , ".influence of extreme values while keeping all records
age_median_imp": "Impute missing age with global median; less"
    ".sensitive to outliers than mean
{
    (print(cleaning_decisions
(df_clean = clean_data_project(df_raw
    ()print(df_clean.info
    ()print(df_clean[["age", "income"]].describe
    ()print(df_clean["city"].value_counts().head
    (print(df_clean["signup_time"].dt.tz

```