# Solution

# Re-run this cell

import pandas as pd

# Read in the data

schools = pd.read\_csv("schools.csv")

# Preview the data

schools.head()

# Start coding here...

# Which schools are best for math?

best\_math\_schools = schools[schools["average\_math"] >= 640][["school\_name", "average\_math"]].sort\_values("average\_math", ascending=False)

# Calculate total\_SAT per school

schools["total\_SAT"] = schools["average\_math"] + schools["average\_reading"] + schools["average\_writing"]

# Who are the top 10 performing schools?

top\_10\_schools = schools.sort\_values("total\_SAT", ascending=False)[["school\_name", "total\_SAT"]].head(10)

# Which NYC borough has the highest standard deviation for total\_SAT?

boroughs = schools.groupby("borough")["total\_SAT"].agg(["count", "mean", "std"]).round(2)

# Filter for max std and make borough a column

largest\_std\_dev = boroughs[boroughs["std"] == boroughs["std"].max()]

# Rename the columns for clarity

largest\_std\_dev = largest\_std\_dev.rename(columns={"count": "num\_schools", "mean": "average\_SAT", "std": "std\_SAT"})