Python ↔ R File I/O Cheat Sheet

R: base + readr/readxl/jsonlite. Python: pandas + json/pickle. Snippets assume files exist in the working directory.

Working directory / paths

R	Python
`getwd() setwd('/path/to/project') file.exists('data.csv')`	`import os os.getcwd() os.chdir('/path/to/project') os.path.exists('data.csv')`

CSV: read / write

R	Python
`# base df <- read.csv('data.csv') write.csv(df, 'out.csv', row.names=FALSE) # readr (faster) library(readr) df <- read_csv('data.csv') write_csv(df, 'out.csv')`	`import pandas as pd df = pd.read_csv('data.csv') df.to_csv('out.csv', index=False)`

Delimited text (TSV / custom separator)

R	Python
`df <- read.delim('data.tsv') df <- read.table('data.txt', sep='|', header=TRUE) write.table(df, 'out.tsv', sep='\t', row.names=FALSE)`	`df = pd.read_csv('data.tsv', sep='\t') df = pd.read_csv('data.txt', sep='|') df.to_csv('out.tsv', sep='\t', index=False)`

Excel: read / write

R	Python
`library(readxl) df <- read_excel('data.xlsx', sheet='Sheet1') # write library(writexl) write_xlsx(df, 'out.xlsx')`	`df = pd.read_excel('data.xlsx', sheet_name='Sheet1') df.to_excel('out.xlsx', index=False)`

JSON: read / write

R	Python

`library(jsonlite) x <- fromJSON('data.json') write_json(x, 'out.json', pretty=TRUE, auto_unbox=TRUE)`	`import json with open('data.json', 'r') as f: x = json.load(f) with open('out.json', 'w') as f: json.dump(x, f, indent=2)`

Binary objects: save / load (RDS ↔ pickle)

R	Python
`saveRDS(df, 'df.rds') df2 <- readRDS('df.rds')`	`import pickle with open('df.pkl', 'wb') as f: pickle.dump(df, f) with open('df.pkl', 'rb') as f: df2 = pickle.load(f)`

Parquet: read / write (fast, columnar)

R	Python
`library(arrow) df <- read_parquet('data.parquet') write_parquet(df, 'out.parquet')`	`# requires pyarrow or fastparquet df = pd.read_parquet('data.parquet') df.to_parquet('out.parquet', index=False)`

Feather: read / write

R	Python
`library(arrow) df <- read_feather('data.feather') write_feather(df, 'out.feather')`	`df = pd.read_feather('data.feather') df.to_feather('out.feather')`

SQL database: read / write

R	Python
`library(DBI) con <- dbConnect(RSQLite::SQLite(), 'my.db') df <- dbReadTable(con, 'my_table') dbWriteTable(con, 'new_table', df, overwrite=TRUE) dbDisconnect(con)`	`import sqlite3 con = sqlite3.connect('my.db') df = pd.read_sql('SELECT * FROM my_table', con) df.to_sql('new_table', con, if_exists='replace', index=False) con.close()`

Plain text: read / write

R	Python
`lines <- readLines('notes.txt') writeLines(lines, 'out_notes.txt')`	`with open('notes.txt', 'r') as f: lines = f.read().splitlines() with open('out_notes.txt', 'w') as f: f.write('\n'.join(lines))`