

# pandas (R)osetta: Pandas

Intro to Pandas for R users and vice versa.

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This is a demonstration of basic data wrangling operations in the Pandas library for Python.

Sister notebooks demonstrate the exact same operations in base R and Tidyverse R, just like the Rosetta Stone.

## I/O

### Create dataframe from scratch

```
import pandas as pd

df = pd.DataFrame(
    {"letter" : ["a", "b", "c", "d", "e"],
     "number" : range(1,6),
     "fruit" : ["apple", "banana", "coconut", "date", "elderberry"],
     "vegetable" : ["arugula", "beet", "carrot", "daikon", "eggplant"],
     "name" : ["Alice", "Bob", "Carol", "Dan", "Eve"]}
)
df
```

```
##   letter  number      fruit vegetable   name
## 0      a       1      apple  arugula  Alice
## 1      b       2     banana      beet    Bob
## 2      c       3    coconut    carrot  Carol
## 3      d       4       date    daikon   Dan
## 4      e       5  elderberry  eggplant   Eve
```

### Write

```
df.to_csv("data/py_letters.csv", index=False)
df.to_csv("data/py_letters.tsv", sep="\t", index=False)
```

## Read

```
pd.read_csv("data/py_letters.csv")
```

|      | letter | number | fruit      | vegetable | name  |
|------|--------|--------|------------|-----------|-------|
| ## 0 | a      | 1      | apple      | arugula   | Alice |
| ## 1 | b      | 2      | banana     | beet      | Bob   |
| ## 2 | c      | 3      | coconut    | carrot    | Carol |
| ## 3 | d      | 4      | date       | daikon    | Dan   |
| ## 4 | e      | 5      | elderberry | eggplant  | Eve   |

```
pd.read_table("data/py_letters.tsv")
```

|      | letter | number | fruit      | vegetable | name  |
|------|--------|--------|------------|-----------|-------|
| ## 0 | a      | 1      | apple      | arugula   | Alice |
| ## 1 | b      | 2      | banana     | beet      | Bob   |
| ## 2 | c      | 3      | coconut    | carrot    | Carol |
| ## 3 | d      | 4      | date       | daikon    | Dan   |
| ## 4 | e      | 5      | elderberry | eggplant  | Eve   |