## Exercise (Part 3)

```
In [18]:
          import pandas as pd
          meteorites = pd.read_csv('Meteorite_Landings.csv')
          meteorites.head()
Out[18]:
                         id nametype
                                           recclass mass (g) fall
                                                                                                       reclong
                                                                                                                       GeoLocation
                name
                                                                                    year
                                                                                             reclat
          0
               Aachen
                         1
                                  Valid
                                                L5
                                                        21.0
                                                             Fell 01/01/1880 12:00:00 AM
                                                                                           50.77500
                                                                                                       6.08333
                                                                                                                   (50.775, 6.08333)
               Aarhus
                          2
                                  Valid
                                                Н6
                                                       720.0
                                                             Fell 01/01/1951 12:00:00 AM
                                                                                           56.18333
                                                                                                      10.23333 (56.18333, 10.23333)
          2
                 Abee
                          6
                                  Valid
                                              EH4 107000.0
                                                             Fell 01/01/1952 12:00:00 AM
                                                                                           54.21667
                                                                                                    -113.00000
                                                                                                                   (54.21667, -113.0)
          3 Acapulco
                                 Valid Acapulcoite
                                                             Fell 01/01/1976 12:00:00 AM
                                                                                          16.88333
                                                                                                     -99.90000
                        10
                                                      1914.0
                                                                                                                    (16.88333, -99.9)
                                                L6
                                                                                                      -64.95000
               Achiras 370
                                  Valid
                                                       780.0
                                                             Fell 01/01/1902 12:00:00 AM -33.16667
                                                                                                                  (-33.16667, -64.95)
In [19]: meteorites.dtypes
Out[19]:
          name
                            object
                             int64
          id
          nametype
                            object
          recclass
                            object
          mass (g)
                           float64
          fall
                            object
                            object
          year
          reclat
                           float64
          reclong
                           float64
          GeoLocation
                            object
          dtype: object
         meteorites.year[2].split(" ")[0].split("/")[2]
In [20]:
Out[20]: '1952'
          type(meteorites.year[0])
In [21]:
Out[21]: str
```

1 of 3 27/03/2025, 7:27 PM

MTerm\_ExerciseP3 about:srcdoc

In [22]: meteorites.fillna(0)

| Out[22]: |       | name          | id    | nametype | recclass                | mass (g) | fall  | year                      | reclat    | reclong    | GeoLocation               |
|----------|-------|---------------|-------|----------|-------------------------|----------|-------|---------------------------|-----------|------------|---------------------------|
| -        | 0     | Aachen        | 1     | Valid    | L5                      | 21.0     | Fell  | 01/01/1880<br>12:00:00 AM | 50.77500  | 6.08333    | (50.775,<br>6.08333)      |
|          | 1     | Aarhus        | 2     | Valid    | Н6                      | 720.0    | Fell  | 01/01/1951<br>12:00:00 AM | 56.18333  | 10.23333   | (56.18333,<br>10.23333)   |
|          | 2     | Abee          | 6     | Valid    | EH4                     | 107000.0 | Fell  | 01/01/1952<br>12:00:00 AM | 54.21667  | -113.00000 | (54.21667,<br>-113.0)     |
|          | 3     | Acapulco      | 10    | Valid    | Acapulcoite             | 1914.0   | Fell  | 01/01/1976<br>12:00:00 AM | 16.88333  | -99.90000  | (16.88333,<br>-99.9)      |
|          | 4     | Achiras       | 370   | Valid    | L6                      | 780.0    | Fell  | 01/01/1902<br>12:00:00 AM | -33.16667 | -64.95000  | (-33.16667,<br>-64.95)    |
|          | •••   |               | •••   |          |                         |          | •••   |                           |           |            |                           |
|          | 45711 | Zillah 002    | 31356 | Valid    | Eucrite                 | 172.0    | Found | 01/01/1990<br>12:00:00 AM | 29.03700  | 17.01850   | (29.037,<br>17.0185)      |
|          | 45712 | Zinder        | 30409 | Valid    | Pallasite,<br>ungrouped | 46.0     | Found | 01/01/1999<br>12:00:00 AM | 13.78333  | 8.96667    | (13.78333,<br>8.96667)    |
|          | 45713 | Zlin          | 30410 | Valid    | H4                      | 3.3      | Found | 01/01/1939<br>12:00:00 AM | 49.25000  | 17.66667   | (49.25,<br>17.66667)      |
|          | 45714 | Zubkovsky     | 31357 | Valid    | L6                      | 2167.0   | Found | 01/01/2003<br>12:00:00 AM | 49.78917  | 41.50460   | (49.78917,<br>41.5046)    |
|          | 45715 | Zulu<br>Queen | 30414 | Valid    | L3.7                    | 200.0    | Found | 01/01/1976<br>12:00:00 AM | 33.98333  | -115.68333 | (33.98333,<br>-115.68333) |
|          |       |               |       |          |                         |          |       |                           |           |            |                           |

45716 rows × 10 columns

2 of 3 27/03/2025, 7:27 PM

MTerm\_ExerciseP3 about:srcdoc

3 of 3 27/03/2025, 7:27 PM