13/10/22, 17:53 Part I flights data

```
In [14]: import pandas as pd
```

Part I - Data import

1. Creating the new data frame

```
In [15]:
         # Get 2019, 2020 and 2021 data of worldwide flights during the month of July
         data2019 = pd.read_csv("flightlist_20190701_20190731.csv")
          data2020 = pd.read_csv("flightlist_20200701_20200731.csv")
          data2021 = pd.read csv("flightlist 20210701 20210731.csv")
         data2019.head()
In [16]:
          data2020.head()
          data2021.head()
Out[16]:
             callsign number icao24 registration typecode origin destination
                                                                                              la
                                                                                firstseen
                                                                              2021-06-30
                                                                                           2021
         0 HAL1915
                        NaN
                             a48379
                                        N390HA
                                                    A332
                                                         KTCM
                                                                      NaN
                                                                           00:04:09+00:00 01:06:51
                                                                              2021-06-30
                                                                                           2021
             ETH728
                        NaN 040141
                                           NaN
                                                    NaN
                                                          KEWR
                                                                     EBBR
                                                                           02:06:58+00:00 04:45:06
                                                                              2021-06-30
                                                                                           2021
             ACI410A
                                        F-ONET
                                                          RJAA
                        NaN 3a3493
                                                    A339
                                                                     NZAA
                                                                           03:19:14+00:00 04:19:20
                                                                              2021-06-30
                                                                                           2021
           OAE7881
                        NaN a45199
                                        N378AX
                                                    B763
                                                          YBBN
                                                                      KBFI
                                                                           04:25:46+00:00
                                                                                        08:47:15
                                                                                           2021
                                                                              2021-06-30
              SIA244
                        NaN 76cd07
                                                          YBBN
                                                                     WSAC
                                           NaN
                                                    NaN
                                                                           04:34:26+00:00 06:13:09
         # Filtering the data to obtain each destination airport separately
In [17]:
          # Year 2019
          dataROME2019 = data2019[data2019['destination'] == 'LIRF']
          print(f'The number of flights with destination to Rome during July 2019 were: {len
          dataMILAN2019 = data2019[data2019['destination'] == 'LIMC']
          print(f'The number of flights with destination to Milan during July 2019 were: {le
          dataVENICE2019 = data2019[data2019['destination'] == 'LIPZ']
         print(f'The number of flights with destination to Venice during July 2019 were: {10
         dataBOLOGNA2019 = data2019[data2019['destination'] == 'LIPE']
          print(f'The number of flights with destination to Bologna during July 2019 were: {
          dataBERGAMO2019 = data2019[data2019['destination'] == 'LIME']
         print(f'The number of flights with destination to Bergamo during July 2019 were: {
         # Year 2020
          dataROME2020 = data2020[data2020['destination'] == 'LIRF']
          print(f'The number of flights with destination to Rome during July 2020 were: {len
          dataMILAN2020 = data2020[data2020['destination'] == 'LIMC']
          print(f'The number of flights with destination to Milan during July 2020 were: {le
          dataVENICE2020 = data2020[data2020['destination'] == 'LIPZ']
          print(f'The number of flights with destination to Venice during July 2020 were: {le
          dataBOLOGNA2020 = data2020[data2020['destination'] == 'LIPE']
          print(f'The number of flights with destination to Bologna during July 2019 were: {
          dataBERGAM02020 = data2020[data2020['destination'] == 'LIME']
```

print(f'The number of flights with destination to Bergamo during July 2019 were: { }

```
# Year 2021
dataROME2021 = data2021[data2021['destination'] == 'LIRF']
print(f'The number of flights with destination to Rome during July 2020 were: {len
dataMILAN2021 = data2021[data2021['destination'] == 'LIMC']
print(f'The number of flights with destination to Milan during July 2020 were: {len
dataVENICE2021 = data2021[data2021['destination'] == 'LIPZ']
print(f'The number of flights with destination to Venice during July 2020 were: {len
dataBOLOGNA2021 = data2021[data2021['destination'] == 'LIPE']
print(f'The number of flights with destination to Bologna during July 2019 were: {len
dataBERGAMO2021 = data2021[data2021['destination'] == 'LIME']
print(f'The number of flights with destination to Bergamo during July 2019 were: {len
dataBERGAMO2021 = data2021[data2021['destination'] == 'LIME']
```

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```
# Creating a new .csv file for each airport destination and year
In [22]:
         #Year 2019
         dataROME2019.to_csv('ROME2019.csv')
         dataMILAN2019.to_csv('MILAN2019.csv')
         dataVENICE2019.to_csv('VENICE2019.csv')
         dataBOLOGNA2019.to_csv('BOLOGNA2019.csv')
         dataBERGAM02019.to_csv('BERGAM02019.csv')
         #Year 2020
         dataROME2020.to csv('ROME2020.csv')
         dataMILAN2020.to_csv('MILAN2020.csv')
         dataVENICE2020.to_csv('VENICE2020.csv')
         dataBOLOGNA2020.to csv('BOLOGNA2020.csv')
         dataBERGAM02020.to_csv('BERGAM02020.csv')
         #Year 2021
         dataROME2021.to_csv('ROME2021.csv')
         dataMILAN2021.to_csv('MILAN2021.csv')
         dataVENICE2021.to csv('VENICE2021.csv')
         dataBOLOGNA2021.to_csv('BOLOGNA2021.csv')
          dataBERGAMO2021.to_csv('BERGAMO2021.csv')
```