**Prog5:** this program is to merge tap file and Tap \_A-B file to create a complete data record.

Input file: this program takes three input files:

1. Tap\_Jun19.csv
2. Jun2019\_finalfile.csv
3. Jun2019\_finalfile\_B-A.csv

Output file: this program returns only one output file i.e. Tap\_Jun19\_res.csv

User input: user need to enter the name of month and the year(only last two digits i.e ‘19’ for year 2019)

**nof = input("enter the name of month 'Jun':", )  
yr = input("enter the name of yr '19':", )**

**f1 = open(nof+"20"+yr+"\_finalfile.csv", "r")  
f2 = open(nof+"20"+yr+"\_finalfile\_B-A.csv", "r")  
f3 = open("Tap\_"+nof+yr+"\_res.csv", "w")  
  
c1 = csv.reader(f1)  
c2 = csv.reader(f2)  
c3 = csv.writer(f3)  
  
file\_1 = list(c1)  
file\_2 = list(c2)  
  
for i in range(len(file\_1)):  
 for j in range(len(file\_2)):  
 if file\_1[i][0:5] == file\_2[j][0:5]:  
 res = file\_1[i][0:34]  
 # print(res)  
 c3.writerow(res)  
  
f1.close()  
f2.close()  
f3.close()**

the above code is to read two input files i.e. f1 = final file created by prog1 and f2 = B-A file created by prog3 and the store the output in f3=”Tap\_Jun19\_res.csv” file

the above code compares the f1 and f2 and if the rows are similar then store the row in f3.

**df = pd.read\_csv("Tap\_"+nof+yr+"\_res.csv", header=None)  
df.columns = ['Flt\_No', 'Flt\_Dt', 'AC\_Reg', 'Dep\_Stn', 'Arr\_Stn', 'Pay\_Max', 'Pay\_Act', 'ZFW\_Max', 'ZFW\_Act', 'Take\_Off\_Fuel', 'TOW\_Max', 'TOW\_Act', 'Trip\_Fuel', 'LW\_Max', 'LW\_Act', 'Pax\_F', 'Pax\_C', 'Pax\_Y', 'Pax\_Male', 'Pax\_Female','Pax\_Child', 'Pax\_Infant', 'Pax\_Load', 'Load\_Comp', 'Bag\_Load', 'Cargo\_Load', 'Mail\_Load', 'Engg\_Load', 'Dry\_Op\_Wt', 'Cockpit\_Crew', 'Cabin\_Crew', 'Pad\_F', 'Pad\_C', 'Pad\_Y']  
df.sort\_values(['Flt\_No', 'Flt\_Dt'], axis=0, ascending=True, inplace=True)  
# print(df)  
df.to\_csv("Tap\_"+nof+yr+"\_res.csv", index=False)**

the above code is used to read csv file using pandas and add headers to the file and sort the rows w.r.t column\_0 (flight number) and column\_1(flight departure date) and save it to “Tap\_Jun19\_res.csv” file.

**# consist of rows present in Apr2019\_finalfile\_B-A data  
a = pd.read\_csv("Tap\_"+nof+yr+"\_res.csv")  
# read tap file  
b = pd.read\_csv("Tap\_"+nof+yr+".csv")  
# appending tap file data in a file  
merged = a.append(b, sort=False)  
# print(merged)  
merged.to\_csv('Tap\_'+nof+yr+'\_res.csv', index=False**)

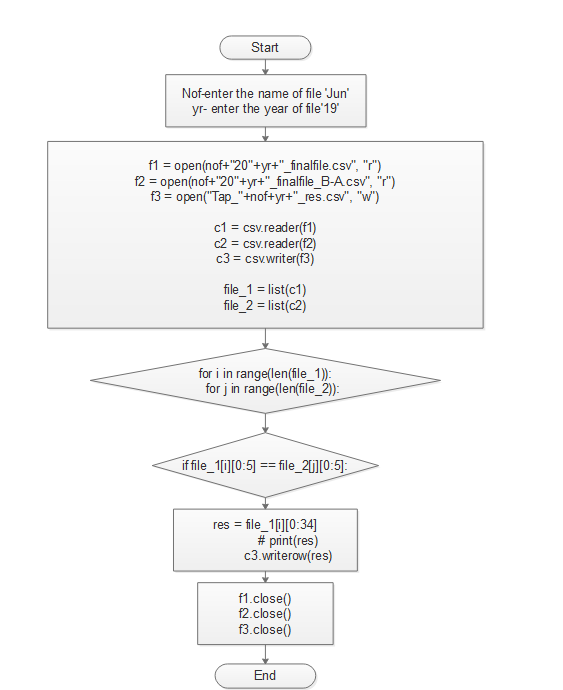
The above code read two csv file i.e Tap\_Jun19\_res.csv and Tap\_Jun19.csv file and merge the both file into Tap\_Jun19\_res.csv file

**# reading result file consist of 42 columns  
df = pd.read\_csv('Tap\_'+nof+yr+'\_res.csv')  
# dropping uneccessary column  
df = df.drop(['LDM\_Dt', 'RMK', 'UndLoadBefLMC', 'ThruBagLoad', 'ThruCargoLoad', 'ThruMailLoad', 'Leg\_No', 'Flt\_No\_Flt\_Dt\_Dep\_Stn\_Arr\_Stn'], axis=1)  
# sorting the file  
df.sort\_values(['Flt\_No', 'Flt\_Dt'], axis=0, ascending=True, inplace=True)  
# saving the result file  
df.to\_csv('Tap\_'+nof+yr+'\_res.csv', index=False)**

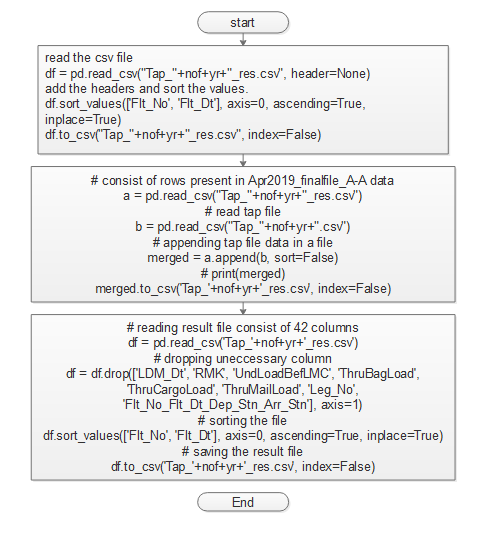
The above code read the Tap\_Jun19\_res.csv file and drop the uneccessary columns and sort the vales w.r.t flight Number and flight departure date columns and save the file in Tap\_jun19\_res.csv file.

**Note:** Prog 5 and Prog 6 has same working only the input changes.

**Flow chart (prog5):** to search for similar rows using key column.



**Flow chart (prog 5):** to merge two files A-Tap file and B-month file.



**Prog 7**: this program is to drop all the rows consist of RMK as ‘XXD’.

Input: Tap\_file.

Output: Tap\_file.

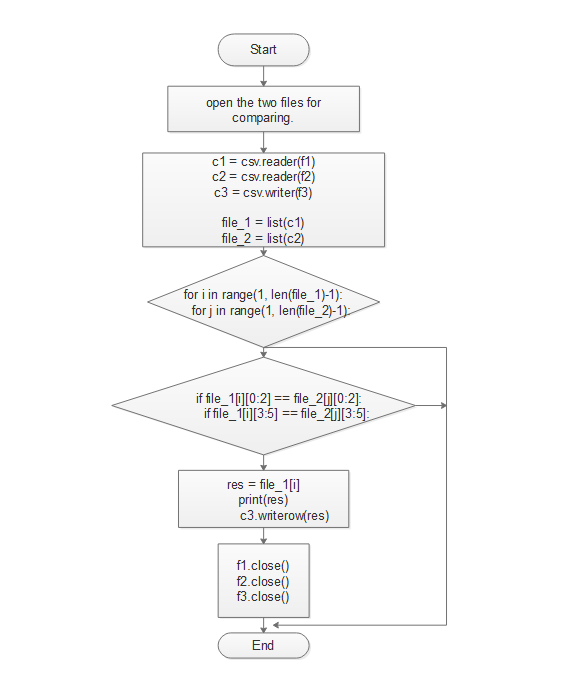
Module used: pandas

Working:

**import pandas as pd  
  
nof = input("Enter the name of file ", )  
yr = input("Enter the yr(only last 2 digits) ", )  
  
df = pd.read\_csv("Tap\_"+nof+yr+".csv")  
df = df[~df.RMK.str.contains("XXD")]  
df.to\_csv("Tap\_"+nof+yr+".csv", index=False)**

read the csv file and negate the rows using RMK column which Contains ‘XXD’ (as shown above) and store the data in csv.

**Prog 4:** this program is to extract similar rows using specific columns.



Input: Tap\_file and month\_finalfile

Output: res\_mmyy.csv

Code:

Initially read csv file and make a list run a loop and the store the data in csv file.

**for i in range(1, len(file\_1)-1):  
 for j in range(1, len(file\_2)-1):  
 if file\_1[i][0:2] == file\_2[j][0:2]:  
 if file\_1[i][3:5] == file\_2[j][3:5]:  
 res = file\_1[i]  
 print(res)  
 c3.writerow(res)**