

Manip 3: pratique pandas

```
In [4]: #Pandas
import pandas as pd

#1- créer Le dataframe

data = {'prenom': ['Alain', 'Abdel', 'Annie', 'Toto', 'Momo'],
        'nom': ['Flouflou', 'Clairclair', "?", 'Icano', 'Jolie'],
        'age': [42, 52, 36, 24, 73],
        'noteintra': [48, 84, 91, "?", "?"],
        'notefinal': ["92,50", "94,00", 77, 63, 75]}
```

```
In [5]: df = pd.DataFrame(data, columns = ['prenom', 'nom', 'age', 'noteintra', 'notefina

#2. save dataframe as csv
df.to_csv('etudiants.csv')
```

```
In [6]: #3. Charger csv
df = pd.read_csv('etudiants.csv')
df
```

Out[6]:

	Unnamed: 0	prenom	nom	age	noteintra	notefinal
0	0	Alain	Flouflou	42	48	92,50
1	1	Abdel	Clairclair	52	84	94,00
2	2	Annie	?	36	91	77
3	3	Toto	Icano	24	?	63
4	4	Momo	Jolie	73	?	75

In [7]: *#4. Charger csv sans Les headers*

```
df = pd.read_csv('etudiants.csv', header=None)
df
```

Out[7]:

	0	1	2	3	4	5
0	NaN	prenom	nom	age	noteintra	notefinal
1	0.0	Alain	Flouflou	42	48	92,50
2	1.0	Abdel	Clairclair	52	84	94,00
3	2.0	Annie	?	36	91	77
4	3.0	Toto	Icano	24	?	63
5	4.0	Momo	Jolie	73	?	75

In [8]: *#5. Charger csv avec specification de noms de colonnes*

```
df = pd.read_csv('etudiants.csv', names=['UID', 'Prenom', 'Nom', 'Age', 'Note int', 'Note final'])
df
```

Out[8]:

	UID	Prenom	Nom	Age	Note intra	Note final
0	NaN	prenom	nom	age	noteintra	notefinal
1	0.0	Alain	Flouflou	42	48	92,50
2	1.0	Abdel	Clairclair	52	84	94,00
3	2.0	Annie	?	36	91	77
4	3.0	Toto	Icano	24	?	63
5	4.0	Momo	Jolie	73	?	75

In [10]: *#6. Charger csv en specifiant "?" comme valeurs manquantes*

```
df = pd.read_csv('etudiants.csv', na_values=['?'])
pd.isnull(df)
df
```

Out[10]:

	Unnamed: 0	prenom	nom	age	noteintra	notefinal
0	0	Alain	Flouflou	42	48.0	92,50
1	1	Abdel	Clairclair	52	84.0	94,00
2	2	Annie	NaN	36	91.0	77
3	3	Toto	Icano	24	NaN	63
4	4	Momo	Jolie	73	NaN	75

In [12]: *#7. Charger csv avec skip des 3 premieres rows*

```
df = pd.read_csv('etudiants.csv', na_values=['?'], skiprows=3)
df
```

Out[12]:

	2	Annie		?	36	91	77
0	3	Toto	Icano	24	NaN	63	
1	4	Momo	Jolie	73	NaN	75	

In [16]: *#8.Ajouter une colonnes*

```
df['devoir'] =pd.Series([82.5, 92.5, 92.0, 99.0, 90.5])
df
```

Out[16]:

	2	Annie		?	36	91	77	devoir
0	3	Toto	Icano	24	NaN	63		82.5
1	4	Momo	Jolie	73	NaN	75		92.5

In []: