

```
import pandas as pd
df=pd.read_excel("/content/Emp.xlsx")
df
```



	EmpNo	EmpName	Skills	CGPA	Gender
0	E101	Josep	C	9.8	Male
1	E102	Marc	Py	NaN	Male
2	E103	Adams	Py	NaN	Male
3	E104	Mabel	Java	8.9	Female
4	E105	Anne	C++	9.4	Female
5	E106	Hannah	Java	7.8	Female

#DEALING WITH MISSING VALUES

```
import pandas as pd
import numpy as np

df=pd.read_excel("/content/Emp.xlsx")

CountofEmp = 0
avg = 0

for CGPA in df['CGPA']:
    if str(CGPA).replace('.', '', 1).isdigit():
        CountofEmp += 1
        avg += CGPA
avg /= CountofEmp

df = df.replace(to_replace=np.nan, value=avg)

df
```

	EmpNo	EmpName	Skills	CGPA	Gender
0	E101	Josep	C	9.800	Male
1	E102	Marc	Py	8.975	Male
2	E103	Adams	Py	8.975	Male
3	E104	Mabel	Java	8.900	Female
4	E105	Anne	C++	9.400	Female
5	E106	Hannah	Java	7.800	Female

#DATA RESHAPING

```
import pandas as pd
df=pd.read_excel("/content/Emp.xlsx")
df['Gender'] = df['Gender'].map({'Male':0, 'Female':1}).astype(int)
df
```

	EmpNo	EmpName	Skills	CGPA	Gender
0	E101	Josep	C	9.8	0
1	E102	Marc	Py	NaN	0
2	E103	Adams	Py	NaN	0
3	E104	Mabel	Java	8.9	1
4	E105	Anne	C++	9.4	1
5	E106	Hannah	Java	7.8	1

#DATA FILTERING

```
import pandas as pd
df=pd.read_excel("/content/Emp.xlsx")
df = df[df['CGPA']>=8.0]
df
```

```

    EmpNo  EmpName  Skills  CGPA  Gender
0    E101    Josep      C    9.8    Male
1    E102    Mahesh    Java    8.9    Female

import pandas as pd
details = pd.DataFrame({'ID':["E101","E102", "E103", "E104", "E105"],
                        'NAME':['Allen K','Praveen Dev', 'James Clear',
                                'Pooja Sharma','Dicky A'],
                        'Skill':['CSE','CSE','CSE','CSE','CSE']})

print (details, "\n\n")

Project_allocation = pd.DataFrame({'ID':["E101","E102", "E103", "E104", "E105"],
                                   'ProjectID':["P101","P102", "P101", "P102", "NIL"]})

print(Project_allocation,"\n\n")

print(pd.merge(details, Project_allocation, on='ID'))

```

	ID	NAME	Skill
0	E101	Allen K	CSE
1	E102	Praveen Dev	CSE
2	E103	James Clear	CSE
3	E104	Pooja Sharma	CSE
4	E105	Dicky A	CSE

	ID	ProjectID
0	E101	P101
1	E102	P102
2	E103	P101
3	E104	P102
4	E105	NIL

	ID	NAME	Skill	ProjectID
0	E101	Allen K	CSE	P101
1	E102	Praveen Dev	CSE	P102
2	E103	James Clear	CSE	P101
3	E104	Pooja Sharma	CSE	P102
4	E105	Dicky A	CSE	NIL