

### EXP-18

**Aim:** To split Dataframe into groups based on both 'School code' and 'Class' columns using pandas

**pseudocode:**

- ± import the pandas library
- ± create a Dataframe with columns, including "Schoolcode", "Class", and other sample data.
- ± use the group by method to group the Dataframe by both "Schoolcode" and class.
- ± Display the grouped data to verify the grouping

**sample input:**

```
data = { 'School Code': [s1, s1, s2, s2, s3],  
        "Class": [10, 11, 10, 11, 12],  
        'Studentname': [John, Anna, Michael, Sara, Nird],  
        'Marks': [85, 92, 78, 88, 95] }
```

**sample output:**

School code : s1      class : 10

|   | School code | class | Student Name | Marks |
|---|-------------|-------|--------------|-------|
| 0 | s1          | 10    | John         | 85    |
| 1 | s1          | 10    | Anna         | 92    |

**Result:**

This code was been executed successfully and we got the output



```
import pandas as pd

# Sample DataFrame
data = {
    'School_Code': ['S1', 'S2', 'S1', 'S3', 'S2'],
    'Class': ['A', 'B', 'A', 'C', 'B'],
    'Student_Name': ['Alice', 'Bob', 'Charlie', 'David', 'Eve'],
    'Score': [88, 92, 85, 78, 90]
}

df = pd.DataFrame(data)

# Grouping by 'School_Code' and 'Class'
grouped = df.groupby(['School_Code', 'Class'])

# Displaying each group
for name, group in grouped:
    print(f"Group: {name}")
    print(group)
    print("\n")
```



```
Group: ('S1', 'A')
  School_Code Class Student_Name  Score
0         S1    A        Alice     88
2         S1    A        Charlie    85
```

```
Group: ('S2', 'B')
  School_Code Class Student_Name  Score
1         S2    B         Bob     92
4         S2    B         Eve     90
```

```
Group: ('S3', 'C')
  School_Code Class Student_Name  Score
3         S3    C         David     78
```