

* Operations on Rows and Columns :->

In this, we are going to study the operations which changes the structure of Dataframe. The operations are :->

- Adding Columns
- Adding Rows
- Deleting Columns
- Deleting Rows.

• Adding Column to a Dataframe :->

Way I :-> using simple way :->

```
df.name['New Col Name'] = [val1, val2, ---]
df["Age"] = [13, 18, 27, 61, 39]
```

Way II :-> using loc[] method,

```
df.loc[:, "New Col Name"] = [val1, val2, ---]
df.loc[:, "Age"] = [13, 18, 27, 61, 39]
```

Way III :-> using at[] method,

```
df.at[:, "New Col Name"] = [val1, val2, ---]
df.at[:, "Age"] = [13, 18, 27, 61, 39]
```


- Adding Row to a dataframe :->

Way I :-> using `loc[]` method.

```
df.name.loc[row_label] = [list of values]
df.loc['S5'] = ['Sushil', '12th', 'A', 13]
```

Way II :-> using `at[]` method.

```
df.name.at[row_label] = [list of values]
df.at['S5'] = ['Sushil', '12th', 'A', 13]
```

NOTE :-> While adding new rows and columns, if the row or column label already exists in the dataframe, the value gets updated.