

In [1]: `import pandas as pd`

In [5]: `rawdata=pd.read_excel(r"C:\Users\monur\Downloads\16th,17th matplotlib\16th,17th`

In [7]: `rawdata`

Out[7]:

|   | Unnamed: 0 | Unnamed: 1             | Unnamed: 2                                  | Unnamed: 3          | Unnamed: 4 | Unnamed: 5 | Unnamed: 6 | Unnamed: 7 |
|---|------------|------------------------|---|---------------------|------------|------------|------------|------------|
| 0 | NaN        | THIS IS NOT CLEAN DATA | NaN   | NaN                 | NaN        | NaN        | NaN        | NaN        |
| 1 | NaN        | NaN                    | ADDR  | DT                  | NAME       | time       | NaN        | NaN        |
| 2 | NaN        | NaN                    | 45 rd, kenith street, btm, bangalore 500038 | 2022-04-03 00:00:00 | abc        | 8:30:21    | NaN        | NaN        |
| 3 | NaN        | NaN                    | 45 rd, street, hitech, Hd 500038            | 2022-04-02 00:00:00 | dec        | 5:30:21    | NaN        | NaN        |
| 4 | NaN        | NaN                    | NaN   | NaN                 | NaN        | NaN        | NaN        | NaN        |
| 5 | NaN        | NaN                    | NaN   | NaN                 | NaN        | NaN        | NaN        | NaN        |
| 6 | NaN        | THIS IS CLEAN DATA     | NaN   | NaN                 | NaN        | NaN        | NaN        | NaN        |
| 7 | NaN        | NaN                    | House add                                   | street              | city       | state      | zip        | NaN        |
| 8 | NaN        | NaN                    | 45 rd                                       | kenith              | btm        | bangalore  | 50038      | NaN        |

In [9]: `rawtable={  
"ADDR":["45 rd, kenith street, btm, bangalore 500038","45 rd, street, hitech, Hd  
"DT" :["03-04-2022","02-04-2022"],  
"NAME":["abc","dec"],  
"time":["8:30:21","5:30:21"]  
}  
df=pd.DataFrame(rawtable)  
print(df)`

|   | ADDR  | DT         | NAME | time    |
|---|---|------------|------|---------|
| 0 | 45 rd, kenith street, btm, bangalore 500038 | 03-04-2022 | abc  | 8:30:21 |
| 1 | 45 rd, street, hitech, Hd, 500038           | 02-04-2022 | dec  | 5:30:21 |

In [11]: `addr_split=df.ADDR.str.split(',',expand=True) #syntax remember  
addr_split`

```
Out[11]:
```

|   | 0     | 1             | 2      | 3                | 4      |
|---|-------|---------------|--------|------------------|--------|
| 0 | 45 rd | kenith street | btm    | bangalore 500038 | None   |
| 1 | 45 rd | street        | hitech | Hd               | 500038 |

```
In [13]: df['House add']=addr_split[0]
df['House add']
```

```
Out[13]: 0    45 rd
1    45 rd
Name: House add, dtype: object
```

```
In [15]: df['street']=addr_split[1]
df['street']
```

```
Out[15]: 0    kenith street
1          street
Name: street, dtype: object
```

```
In [17]: df['city']=addr_split[2].str.strip()
df['city']
```

```
Out[17]: 0    btm
1    hitech
Name: city, dtype: object
```

```
In [19]: df['state and pin']=addr_split[3].str.strip()
```

```
In [21]: df['state and pin']
```

```
Out[21]: 0    bangalore 500038
1          Hd
Name: state and pin, dtype: object
```

```
In [23]: df['state']=df['state and pin'].str.split(' ',expand=True)[0]
df['state']
```

```
Out[23]: 0    bangalore
1          Hd
Name: state, dtype: object
```

```
In [25]: df['zip']=df['state and pin'].str.split(' ',expand=True)[1]
df['zip']
```

```
Out[25]: 0    500038
1    None
Name: zip, dtype: object
```

```
In [27]: df[['date', 'month', 'year']] = df['DT'].str.split('-', expand=True)
df[['date', 'month', 'year']]
```

```
Out[27]:
```

|   | date | month | year |
|---|------|-------|------|
| 0 | 03   | 04    | 2022 |
| 1 | 02   | 04    | 2022 |

```
In [29]: df.month
```

```
Out[29]: 0    04  
         1    04  
         Name: month, dtype: object
```

```
In [31]: df.year
```

```
Out[31]: 0    2022  
         1    2022  
         Name: year, dtype: object
```

```
In [35]: df.date
```

```
Out[35]: 0    03  
         1    02  
         Name: date, dtype: object
```

```
In [37]: df[['hr', 'min', 'sec']] = df['time'].str.split(':', expand=True)
```

```
In [39]: df[['hr', 'min', 'sec']]
```

```
Out[39]:
```

|   | hr | min | sec |
|---|----|-----|-----|
| 0 | 8  | 30  | 21  |
| 1 | 5  | 30  | 21  |

```
In [41]: df['hr']
```

```
Out[41]: 0    8  
         1    5  
         Name: hr, dtype: object
```

```
In [43]: df['min']
```

```
Out[43]: 0    30  
         1    30  
         Name: min, dtype: object
```

```
In [45]: df['sec']
```

```
Out[45]: 0    21  
         1    21  
         Name: sec, dtype: object
```

```
In [ ]:
```