Uplaoding the saved CSV file downloaded from MyClass

```
from google.colab import files
uploaded = files.upload()
```

Choose Files   No file chosen   Upload widget is only available when the cell has been executed in the current browser session.
Please rerun this cell to enable.
Saving TableData.csv to TableData (1).csv

Importing the neccessary libraries and creating a Dataframe

```
import pandas as pd
import io

df = pd.read_csv(io.BytesIO(uploaded['TableData.csv']))
df.head()
```

	Category	May2021	Mar.2022	Apr.2022(p)	May2022(p)
0	Total nonfarm	447	398	436	390
1	Total private	381	385	405	333
2	Goods-producing	22	85	69	59
3	Mining and logging	6	5	8	5
4	Construction	-12	22	0	36

Importing Matplotlib for Data visualization

```
import matplotlib.pyplot as plt
```

```
df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 37 entries, 0 to 36
Data columns (total 5 columns):
 #   Column       Non-Null Count  Dtype
---  ------       --------------  -----
 0   Category     37 non-null     object
 1   May2021      37 non-null     object
 2   Mar.2022     37 non-null     object
 3   Apr.2022(p)  37 non-null     object
 4   May2022(p)   37 non-null     object
dtypes: object(5)
memory usage: 1.6+ KB
```

Converting the Rows and Columns to Dictionary of Lists in order to plot the the graph for each Category in the respective Months

```
data = {'Category':['May2021','Mar.2022','Apr.2022(p)','May2022(p)'],'Total nonfarm':[447,398,436,390],'Total private
        'Mining and logging':[6,5,8,5],'Construction':[-12,22,0,36],'Manufacturing':[28,58,61,18],'Durable goods(1)':
        'Nondurable goods':[5,17,27,7],'Private service-providing':[359,300,336,274],'Wholesale trade':[8.5,25.9,22.9
```

```
    'Utilities':[-0.9,-0.5,0.5,0.5],'Information':[15,18,15,16],'Financial activities':[0,11,35,8],'Professional
    'Leisure and hospitality':[199,104,83,84],'Other services':[16,15,13,16],'Government':[66,13,31,57],'Total no
    'Total private production and nonsupervisory employees':[81.4,81.5,81.5,81.5],'Average weekly hours':[34.9,34
    'Over-the-month percent change':[0.3,0,0.3,0.3],'Index of aggregate weekly payrolls (2007=100)(4)':[56.6,169.
    'Manufacturing (74 industries)':[55.4,72.3,71.6,66.2]}
df = pd.DataFrame(data)
```

```
df.head()
```

	Category	Total nonfarm	Total private	Goods-producing	Mining and logging	Construction	Manufacturing	Durable goods(1)	Motor vehicles and parts	Nondurable goods
0	May2021	447	381	22	6	-12	28	23	19.6	5
1	Mar.2022	398	385	85	5	22	58	41	18.4	17
2	Apr.2022(p)	436	405	69	8	0	61	34	7.5	27
3	May2022(p)	390	333	59	5	36	18	11	-3.5	7

4 rows × 35 columns

```
plt.rcParams["figure.figsize"] = [7,5]
plt.rcParams["figure.autolayout"] = True

df.plot(kind='line',x='Category',y='Total nonfarm',marker='o',color='g')
#df.plot(kind='line',x='Category',y='Total private')
#df.set_index('Category').plot(kind='bar')
plt.xlabel("Months")
font1 = {'family':'serif','color':'black','size':20}
plt.title("Total nonfarm",fontdict = font1)
plt.grid()

plt.show()
```
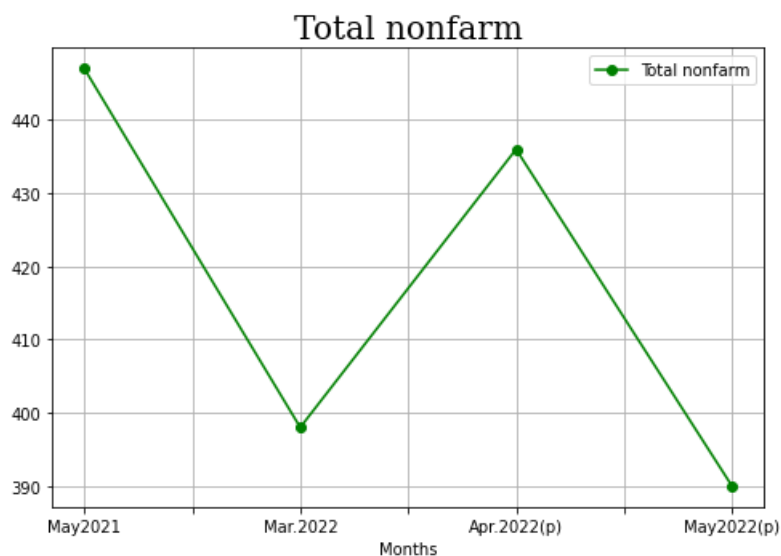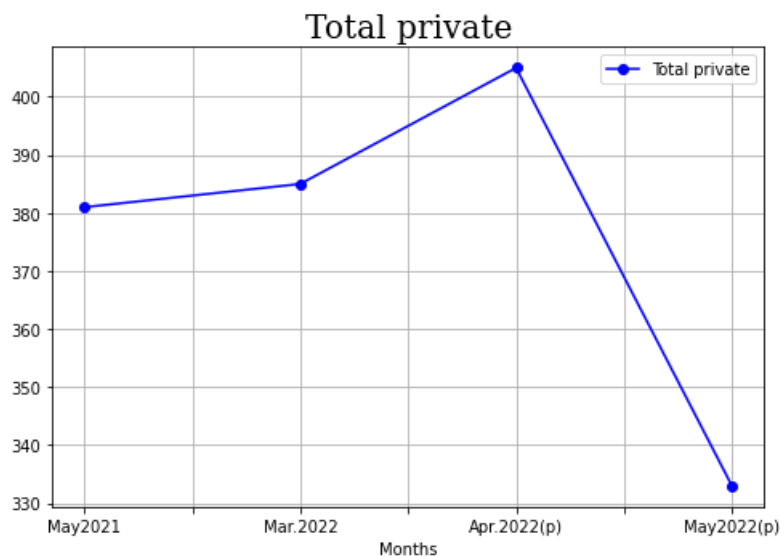


```
df.plot(kind='line',x='Category',y='Total private',marker='o',color='b')
```
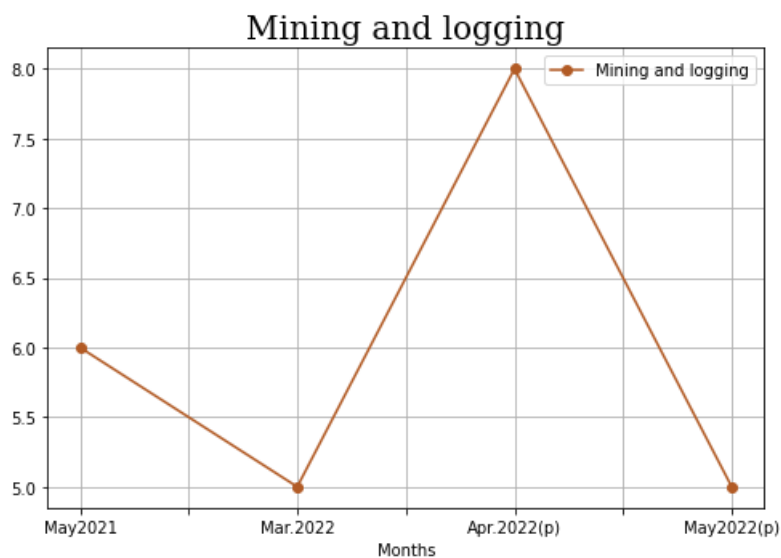
```
plt.xlabel("Months")
font1 = {'family':'serif','color':'black','size':20}
plt.title("Total private",fontdict = font1)
plt.grid()

plt.show()
```
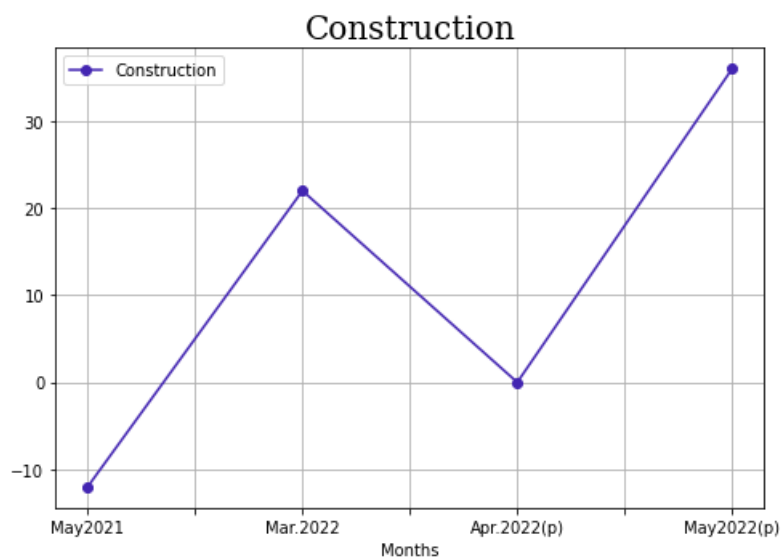


```
df.plot(kind='line',x='Category',y='Mining and logging',marker='o',color='#B25B25')
plt.xlabel("Months")
font1 = {'family':'serif','color':'black','size':20}
plt.title("Mining and logging",fontdict = font1)
plt.grid()

plt.show()
```
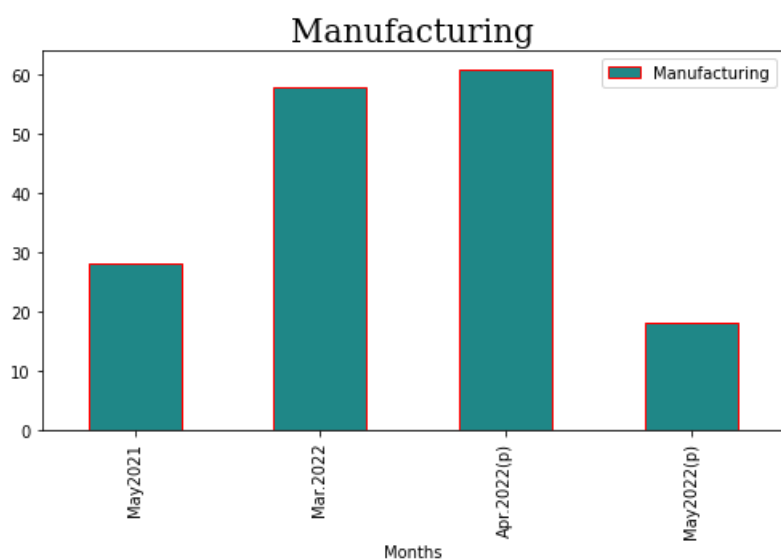


```
df.plot(kind='line',x='Category',y='Construction',marker='o',color='#4325B2')
plt.xlabel("Months")
font1 = {'family':'serif','color':'black','size':20}
plt.title("Construction",fontdict = font1)
plt.grid()

plt.show()
```

Construction


```
df.plot(kind='bar',x='Category',y='Manufacturing',color='#1F8787',edgecolor='red')
plt.xlabel("Months")
font1 = {'family':'serif','color':'black','size':20}
plt.title("Manufacturing",fontdict = font1)

plt.show()
```
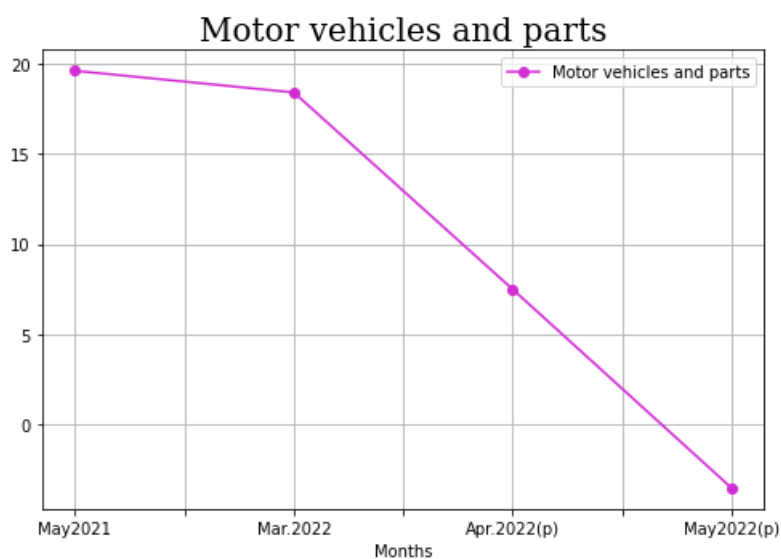
Manufacturing


```
df.plot(kind='bar',x='Category',y='Durable goods(1)',color='#D1D42E',edgecolor='red')
plt.xlabel("Months")
font1 = {'family':'serif','color':'black','size':20}
plt.title("Durable goods",fontdict = font1)

plt.show()
```
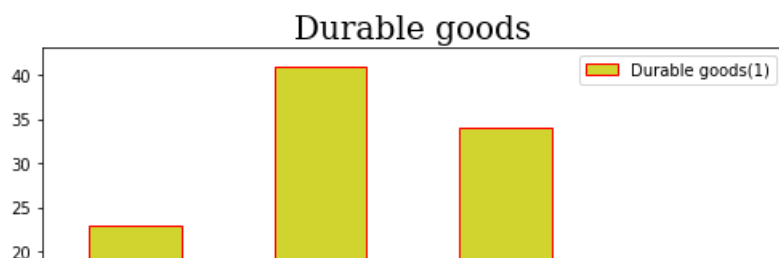
```
df.plot(kind='line',x='Category',y='Motor vehicles and parts',marker='o',color='#D12ED4')
plt.xlabel("Months")
font1 = {'family':'serif','color':'black','size':20}
plt.title("Motor vehicles and parts",fontdict = font1)
plt.grid()

plt.show()
```
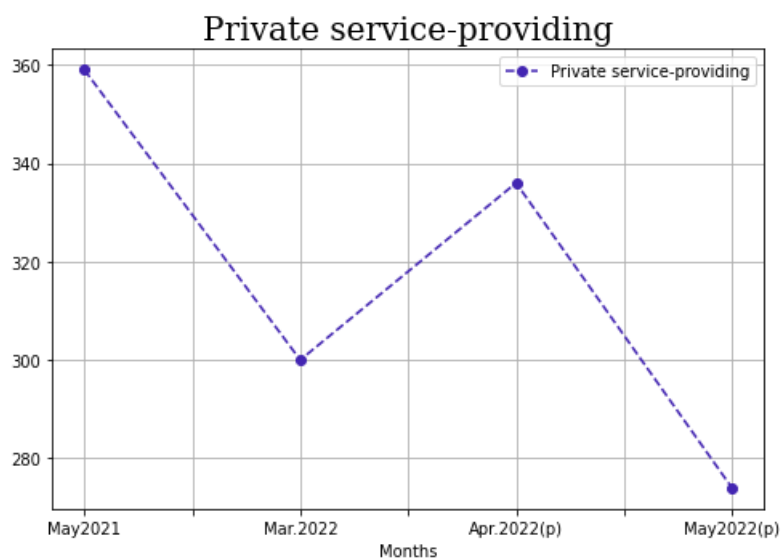


```
df.plot(kind='line',x='Category',y='Nondurable goods',marker='o',color='#6DA95A')
plt.xlabel("Months")
font1 = {'family':'serif','color':'black','size':20}
plt.title("Nondurable goods",fontdict = font1)
plt.grid()

plt.show()
```

```
df.plot(kind='line',x='Category',y='Private service-providing',marker='o',color='#4325B2',linestyle='dashed')
plt.xlabel("Months")
font1 = {'family':'serif','color':'black','size':20}
plt.title("Private service-providing",fontdict = font1)
plt.grid()

plt.show()
```



```
df.plot(kind='bar',x='Category',y='Wholesale trade',color='#EA860E',edgecolor='red')
plt.xlabel("Months")
font1 = {'family':'serif','color':'black','size':20}
plt.title("Wholesale trade",fontdict = font1)

plt.show()
```
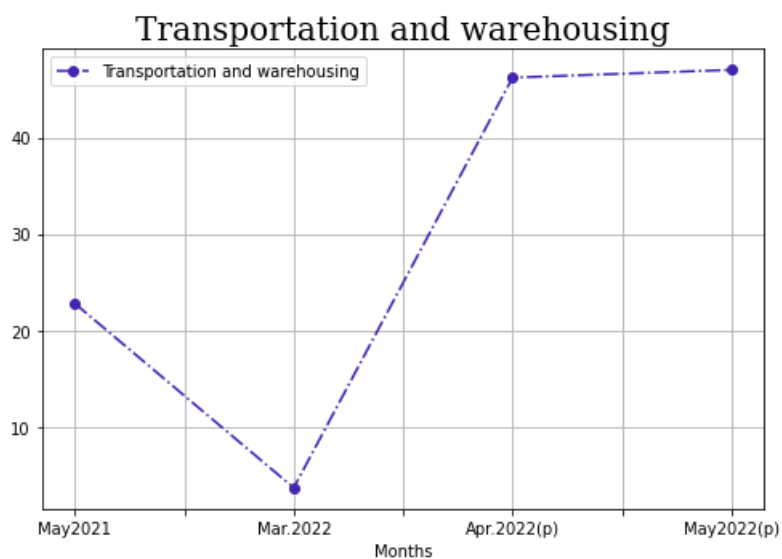


```
df.plot(kind='line',x='Category',y='Retail trade',marker='o',color='#EA0E54',linestyle=':')
plt.xlabel("Months")
font1 = {'family':'serif','color':'black','size':20}
plt.title("Retail trade",fontdict = font1)
plt.grid()

plt.show()
```
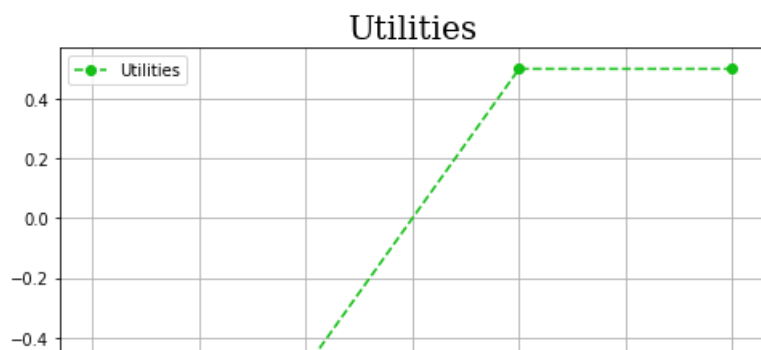
```
df.plot(kind='line',x='Category',y='Transportation and warehousing',marker='o',color='#4325B2',linestyle='-.')
plt.xlabel("Months")
font1 = {'family':'serif','color':'black','size':20}
plt.title("Transportation and warehousing",fontdict = font1)
plt.grid()

plt.show()
```
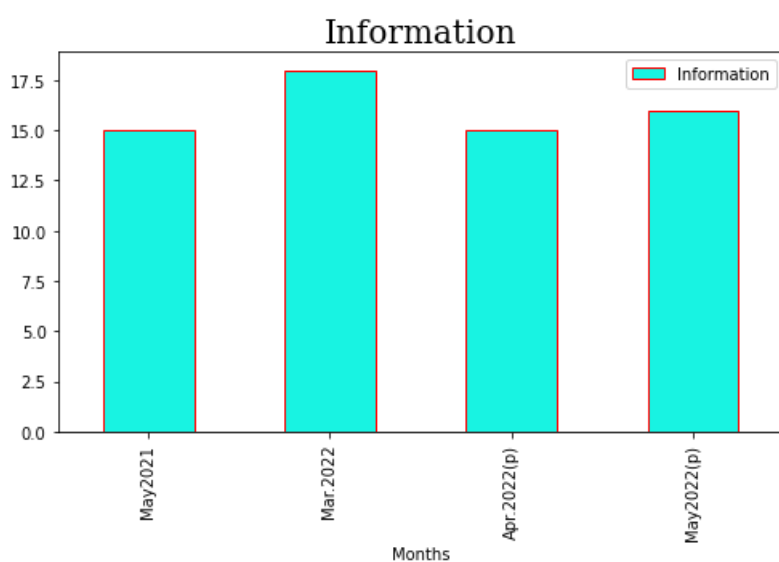


```
df.plot(kind='line',x='Category',y='Utilities',marker='o',color='#14BF16',linestyle='--')
plt.xlabel("Months")
font1 = {'family':'serif','color':'black','size':20}
plt.title("Utilities",fontdict = font1)
plt.grid()

plt.show()
```

```
df.plot(kind='bar',x='Category',y='Information',color='#18F3E2',edgecolor='red')
plt.xlabel("Months")
font1 = {'family':'serif','color':'black','size':20}
plt.title("Information",fontdict = font1)

plt.show()
```



```
df.plot(kind='bar',x='Category',y='Financial activities',color='#F3B018',edgecolor='red')
plt.xlabel("Months")
font1 = {'family':'serif','color':'black','size':20}
plt.title("Financial activities",fontdict = font1)

plt.show()
```

Financial activities

```
df.plot(kind='line',x='Category',y='Professional and business services(1)',marker='o',color='#F32518',linestyle='--')
plt.xlabel("Months")
font1 = {'family':'serif','color':'black','size':20}
plt.title("Professional and business services",fontdict = font1)
plt.grid()

plt.show()
```
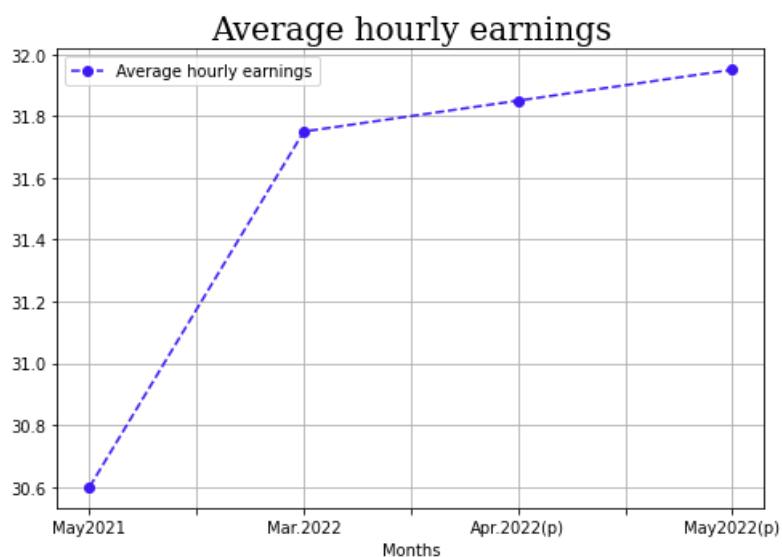


```
df.plot(kind='line',x='Category',y='Temporary help services',marker='o',color='#14BF16',linestyle='-')
plt.xlabel("Months")
font1 = {'family':'serif','color':'black','size':20}
plt.title("Temporary help services",fontdict = font1)
plt.grid()

plt.show()
```
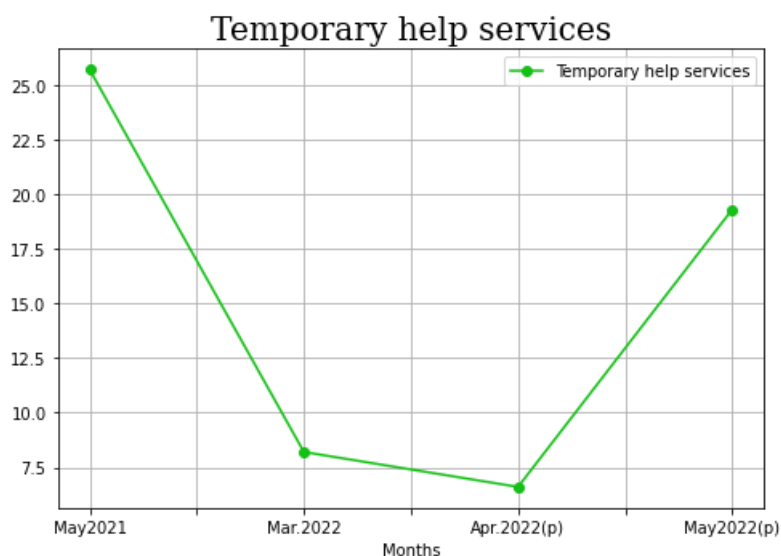


```
df.plot(kind='line',x='Category',y='Average hourly earnings',marker='o',color='#4018F3',linestyle='--')
plt.xlabel("Months")
font1 = {'family':'serif','color':'black','size':20}
plt.title("Average hourly earnings",fontdict = font1)
plt.grid()
```

```
plt.show()
```


Average hourly earnings

```
df.plot(kind='line',x='Category',y='Average weekly earnings',marker='o',color='#3C780E',linestyle='-')
plt.xlabel("Months")
font1 = {'family':'serif','color':'black','size':20}
plt.title("Average weekly earnings",fontdict = font1)
plt.grid()

plt.show()
```
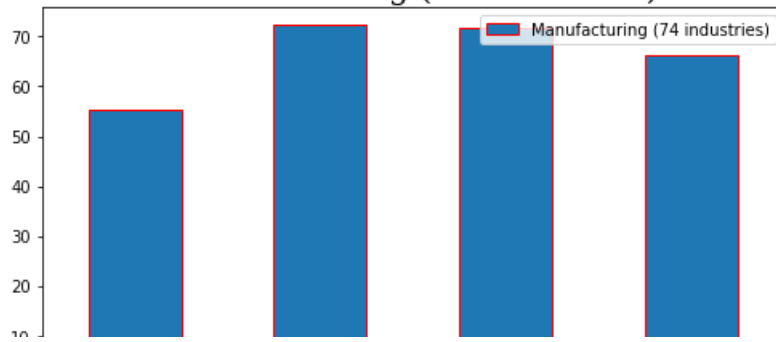

Average weekly earnings
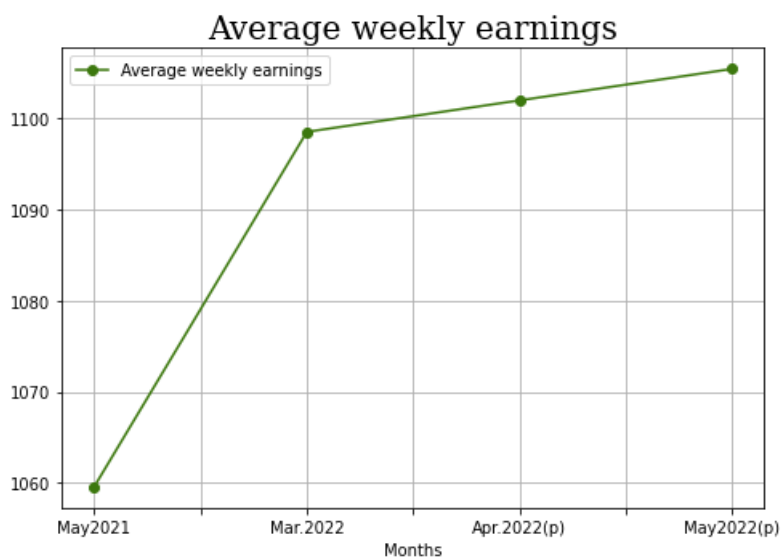
```
df.plot(kind='bar',x='Category',y='Manufacturing (74 industries)',edgecolor='red')
plt.xlabel("Months")
font1 = {'family':'serif','color':'black','size':20}
plt.title("Manufacturing (74 industries)",fontdict = font1)

plt.show()
```

Manufacturing (74 industries)


```python
df.plot(kind='bar',x='Category',y='Total private (256 industries)',color='indigo',edgecolor='red')
plt.xlabel("Months")
font1 = {'family':'serif','color':'black','size':20}
plt.title("Total private (256 industries)",fontdict = font1)

plt.show()
```

Total private (256 industries)