

Company flight_dataset

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In [1]: # prepare library
import psycopg2
import pandas as pd
import pandas.io.sql as psql
import sqlalchemy as sa
import matplotlib as mpl
import matplotlib.pyplot as plt
import numpy as np
import warnings
warnings.filterwarnings('ignore')
```

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In [2]: # proses data
hostname = 'localhost'
database = 'postgres'
username = 'postgres'
pwd = 'sevilla'
port_id = 5432

try:
    conn = psycopg2.connect(host = hostname, dbname = database, user = username, password = pwd, port = port_id)

    sql = """select ud.company,
                sum(case when extract(month from date)=1 then price else 0 end) as jan,
                sum(case when extract(month from date)=2 then price else 0 end) as feb,
                sum(case when extract(month from date)=3 then price else 0 end) as mar,
                sum(case when extract(month from date)=4 then price else 0 end) as apr,
                sum(case when extract(month from date)=5 then price else 0 end) as may,
                sum(case when extract(month from date)=6 then price else 0 end) as jun,
                sum(case when extract(month from date)=7 then price else 0 end) as jul,
                sum(case when extract(month from date)=8 then price else 0 end) as aug,
                sum(case when extract(month from date)=9 then price else 0 end) as sep,
                sum(case when extract(month from date)=10 then price else 0 end) as oct,
                sum(case when extract(month from date)=11 then price else 0 end) as nov,
                sum(case when extract(month from date)=12 then price else 0 end) as dec
            from flight_dataset fd
            join user_dataset ud
            on fd.user_id = ud.user_id
            where extract(year from date) = 2020
            group by ud.company"""

    df = pd.read_sql(sql, conn, index_col=None, coerce_float=True, params=None)

    sql1 = """select ud.company ,
                sum(case when extract(month from date)<7 then price else 0 end) as first_half,
                sum(case when extract(month from date)>6 then price else 0 end) as second_half
            from flight_dataset fd
            join user_dataset ud
            on fd.user_id = ud.user_id
            where extract(year from date) = 2020
            group by ud.company;"""

    df1 = pd.read_sql(sql1, conn, index_col=None, coerce_float=True, params=None)

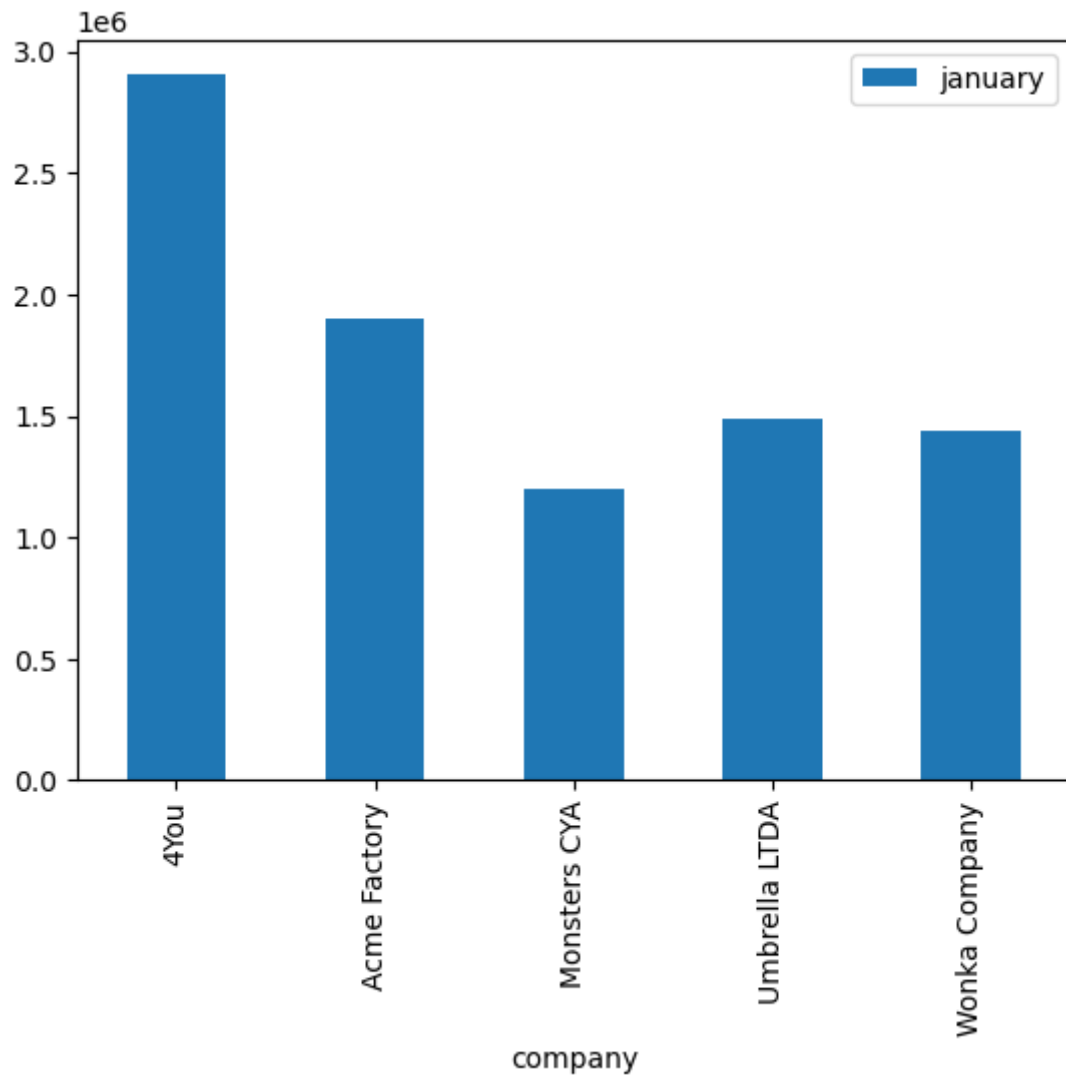
    conn.close()
    print("connection succes and proses done")
```

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except Exception as error:  
    print(error)
```

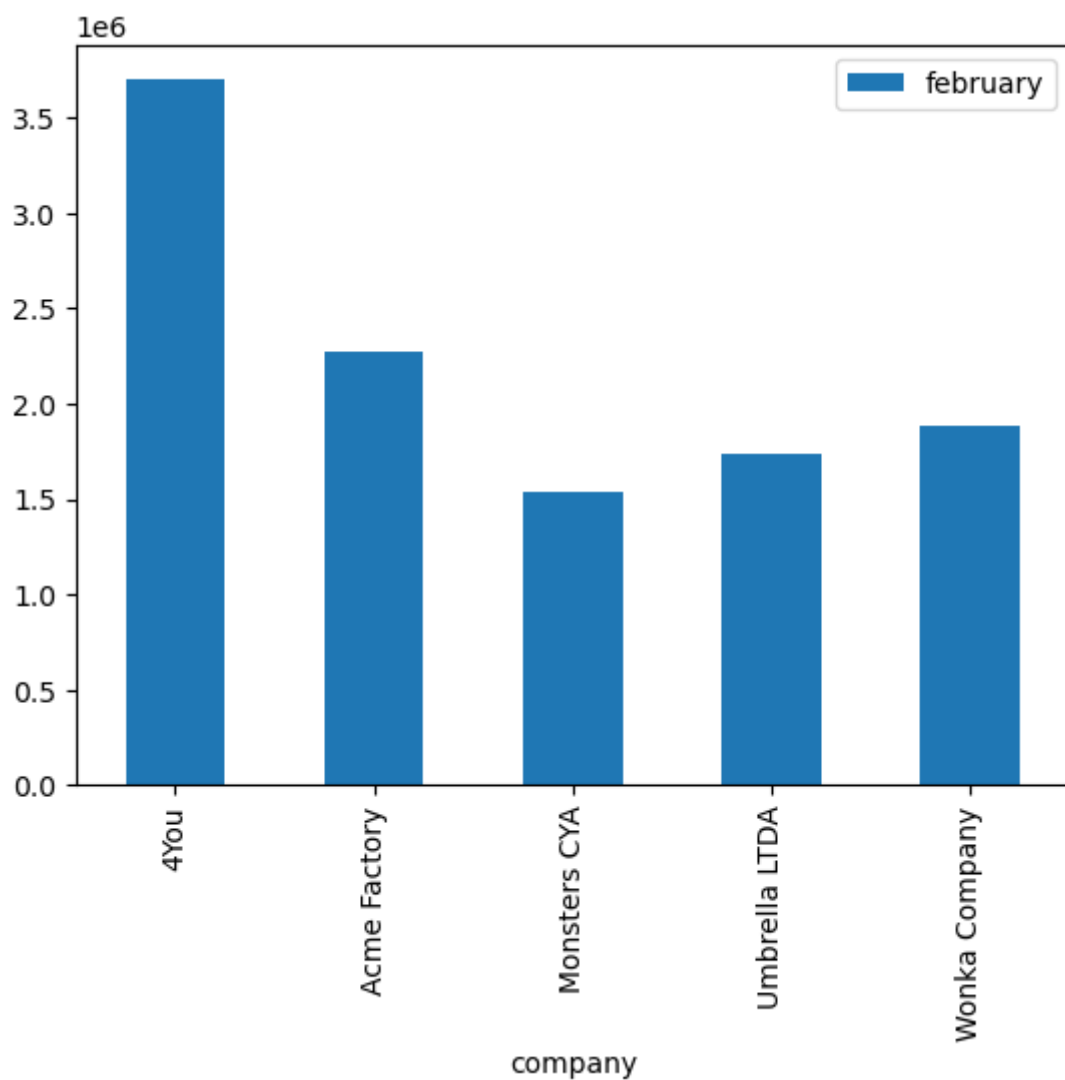
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df

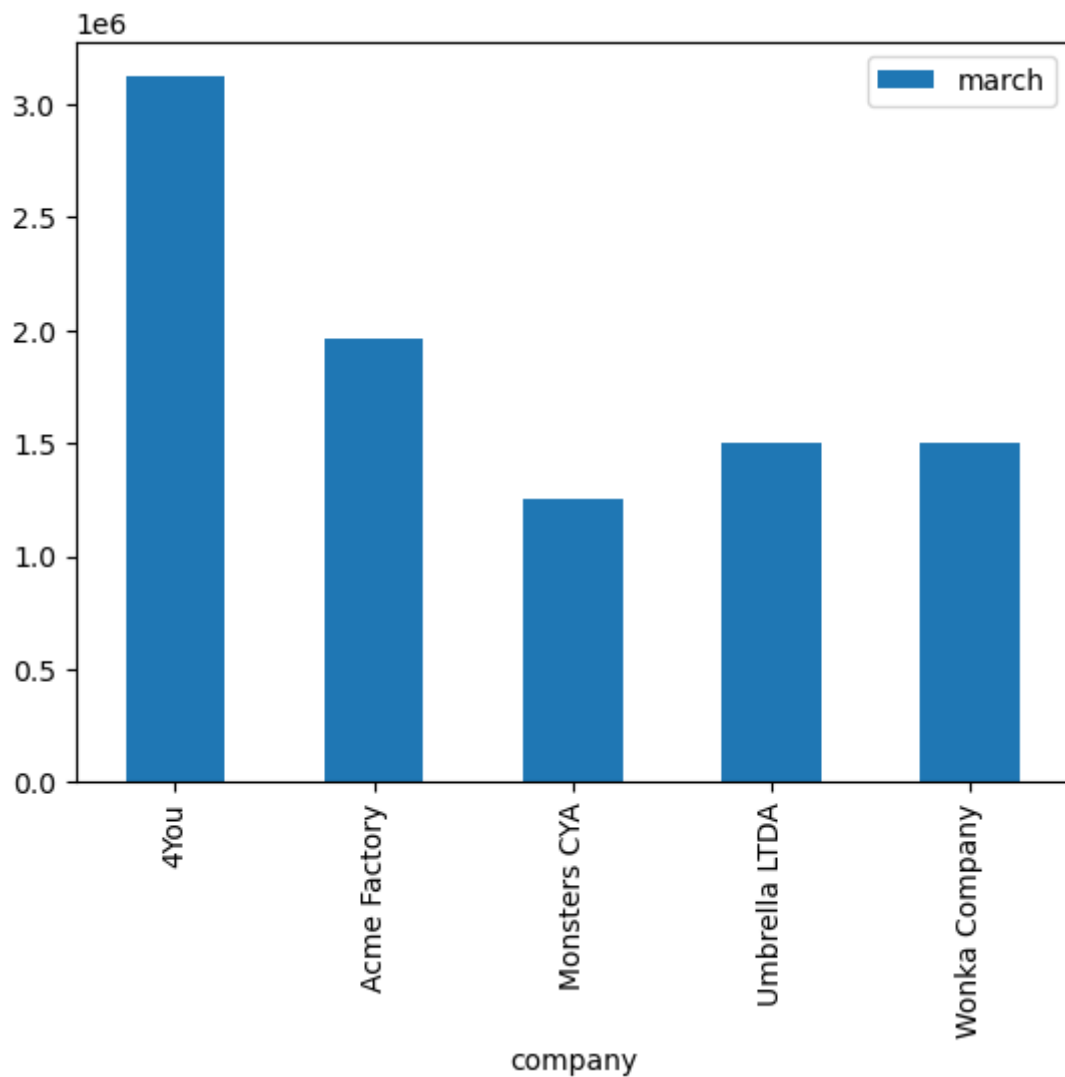
```
In [3]: dfg = pd.DataFrame(df, columns = ['company', 'january'])  
dfg.plot(x='company', y='january', kind='bar')  
plt.show()
```



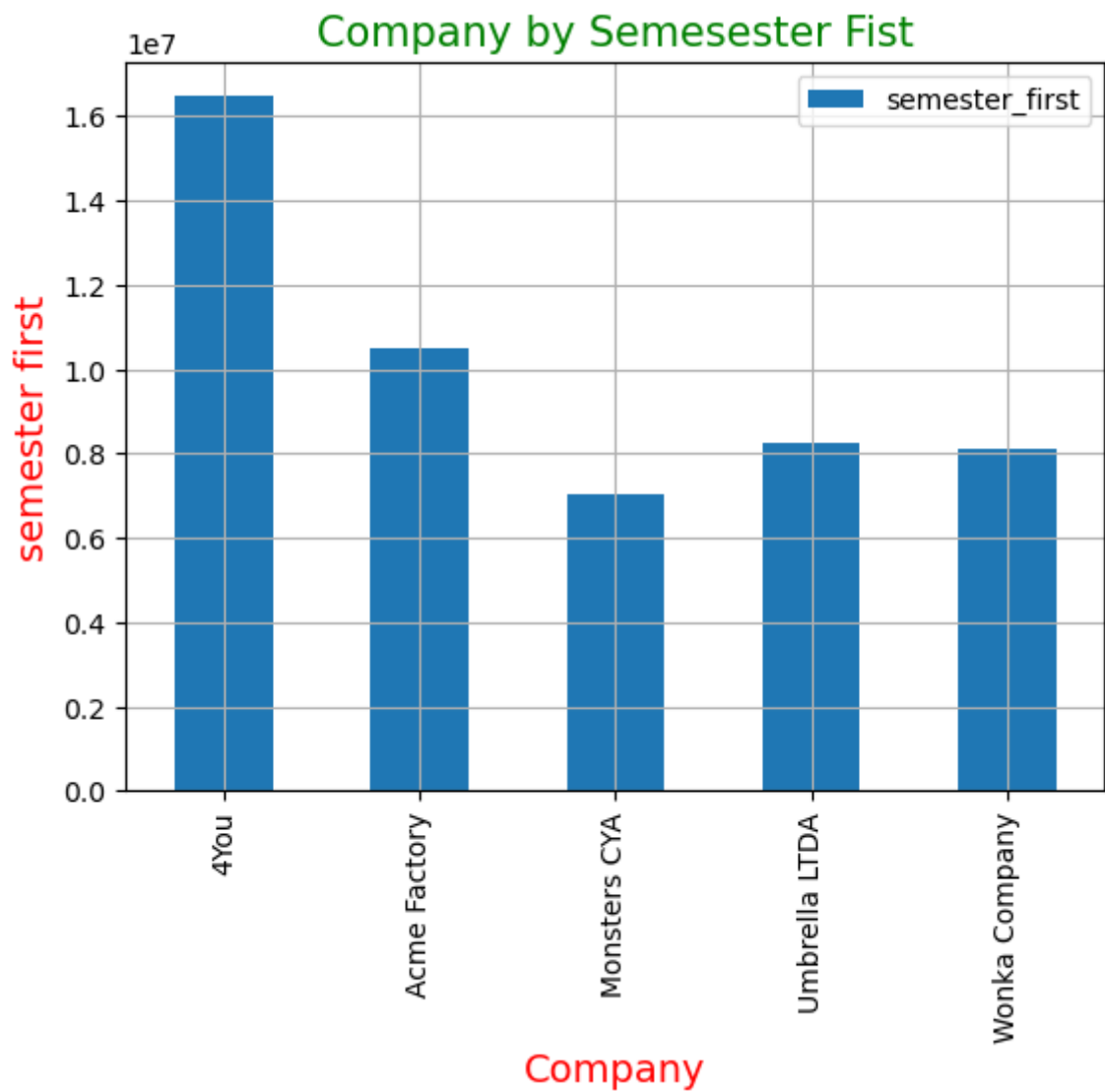
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In [4]: dfg = pd.DataFrame(df, columns = ['company', 'february'])  
dfg.plot(x='company', y='february', kind='bar')  
plt.show()
```



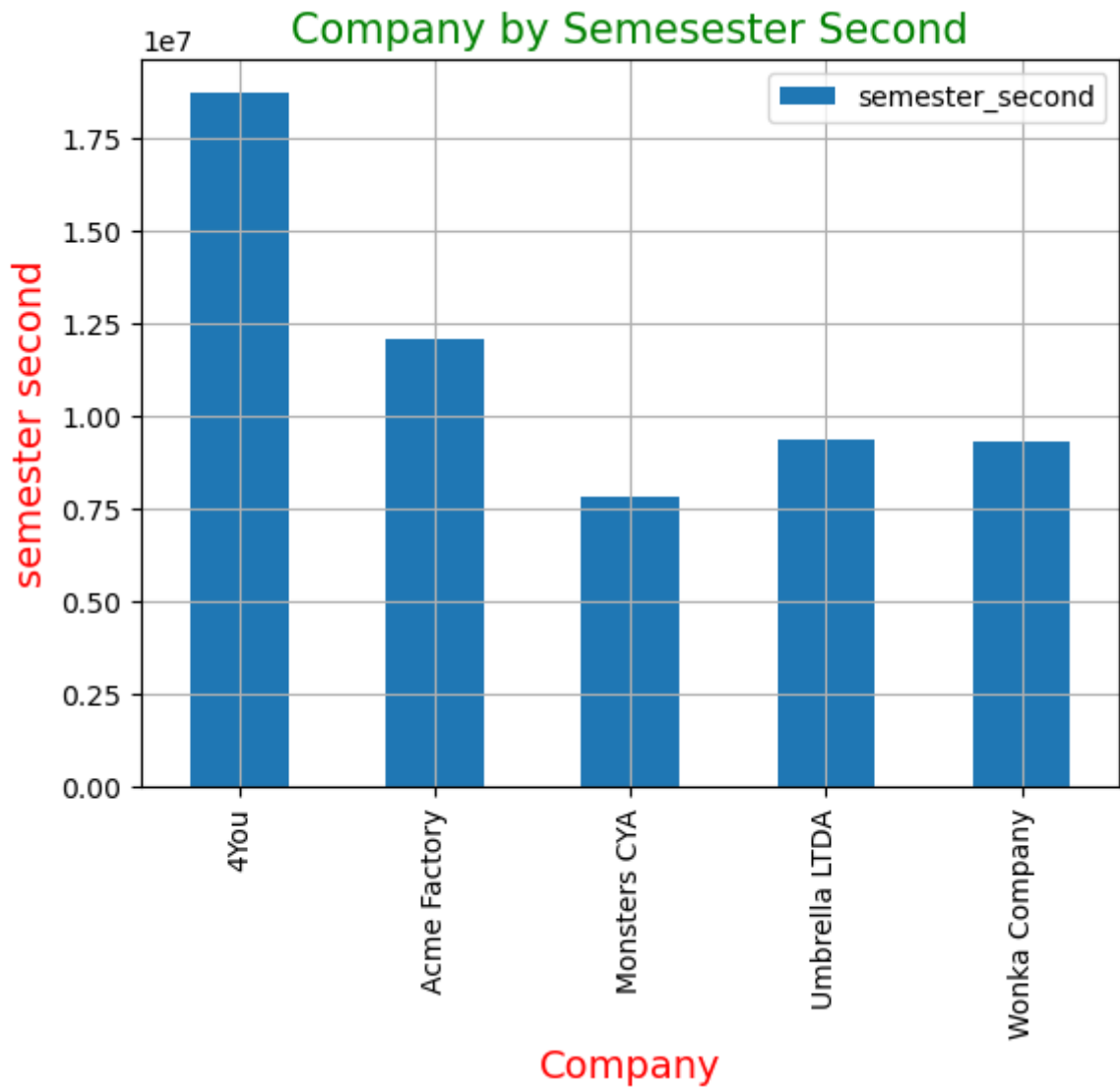
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In [5]: dfg = pd.DataFrame(df, columns = ['company', 'march'])  
dfg.plot(x='company', y='march', kind='bar')  
plt.show()
```



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In [6]: dfg = pd.DataFrame(df1, columns = ['company', 'semester_first'])
dfg.plot(x='company', y='semester_first', kind='bar')
plt.title("Company by Semesester Fist", fontsize=15, color='green')
plt.grid(True)
plt.xlabel('Company', fontsize=14, color='red')
plt.ylabel('semester first', fontsize=14, color='red')
plt.show()
```



```
In [7]: dfg = pd.DataFrame(df1, columns = ['company', 'semester_second'])
dfg.plot(x='company', y='semester_second', kind='bar')
plt.title("Company by Semesester Second", fontsize=15, color='green')
plt.grid(True)
plt.xlabel('Company', fontsize=14, color='red')
plt.ylabel('semester second', fontsize=14, color='red')
plt.show()
```



In []: