```
import pandas as pd
import numpy as np
import datetime
import matplotlib as plt
Dates = ["2018-08-14","2019-10-17","2020-11-14","2020-05-17","2021-09-
15","2021-12-14"]
Courses =["Spark","PySpark","Hadoop","Python","Pandas","Hadoop"]

df = pd.DataFrame({'InsertedDate':
pd.to_datetime(Dates)},index=Courses)
print("DataFrame:\n", df)
```

```
DataFrame:
         InsertedDate
Spark     2018-08-14
PySpark   2019-10-17
Hadoop    2020-11-14
Python    2020-05-17
Pandas    2021-09-15
Hadoop    2021-12-14
```

```
df['Year'] = df['InsertedDate'].dt.strftime('%Y')
df['Month'] = df['InsertedDate'].dt.strftime('%m')
df['Amount']=[10000,20000,50000,5000,8000,7000]
df
#print("Get month and year from datetime column:\n", df)
```

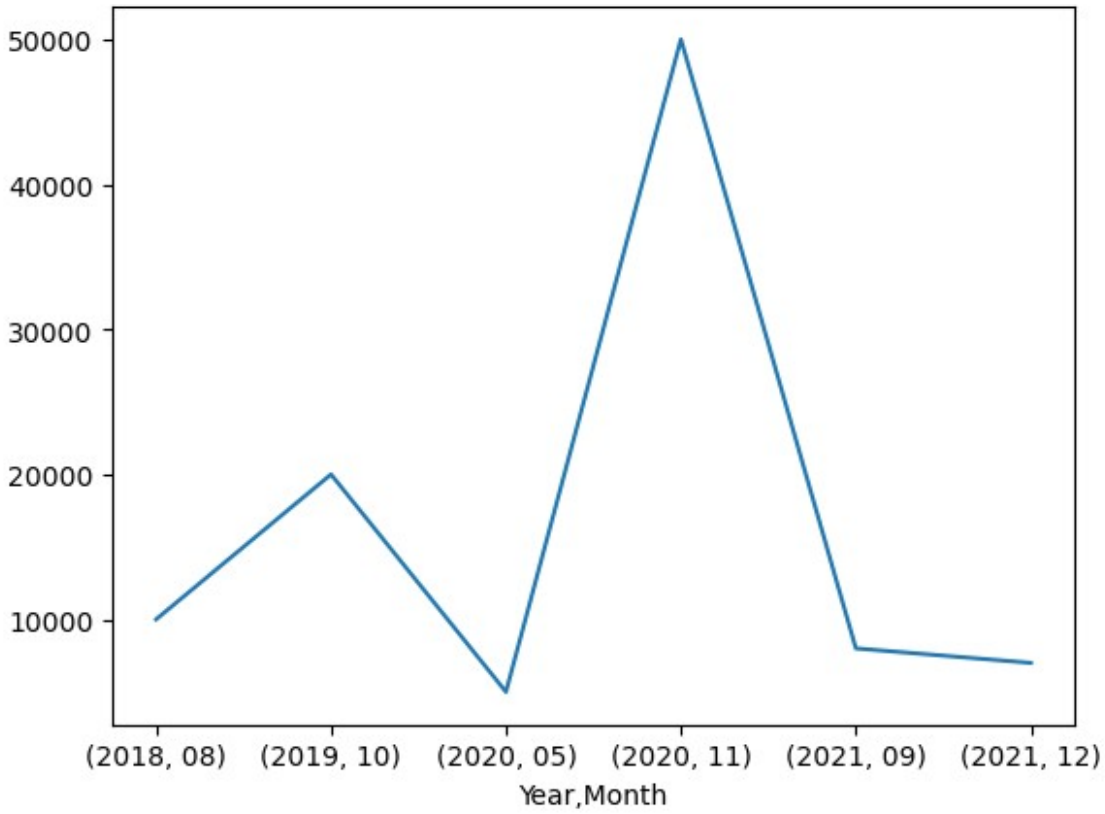
```
        InsertedDate  Year Month  Amount
Spark     2018-08-14  2018    08   10000
PySpark   2019-10-17  2019    10   20000
Hadoop    2020-11-14  2020    11   50000
Python    2020-05-17  2020    05    5000
Pandas    2021-09-15  2021    09    8000
Hadoop    2021-12-14  2021    12    7000
```

```
df.set_index(['Year'])
```

```
     InsertedDate Month  Amount
Year
2018   2018-08-14    08   10000
2019   2019-10-17    10   20000
2020   2020-11-14    11   50000
2020   2020-05-17    05    5000
2021   2021-09-15    09    8000
2021   2021-12-14    12    7000
```

```
df.groupby(['Year','Month'])['Amount'].sum().plot()
```

```
<Axes: xlabel='Year,Month'>
```


50000
40000
30000
20000
10000
(2018, 08)
(2019, 10)
(2020, 05)
(2020, 11)
(2021, 09)
(2021, 12)
Year,Month