Program1b-Data Visualization- Read from csv file, gather information and obtain 2-D plot

In [3]:
```
import pandas as pd # We'll be using Pandas library to work with the dataset

from matplotlib import pyplot as plt #import pyplot from matplotlib as plt
```

In [4]:
```
sd=pd.read_csv('sample_data.csv') #read the file as sd
```

In [5]:
```
sd #diplay the content of the file by calling sd
```

Out[5]:

	column_a	column_b	column_c
0	1	1	10
1	2	4	8
2	3	9	6
3	4	16	4
4	5	25	2

In [6]:
```
type(sd) #type of sd
```

Out[6]:
```
pandas.core.frame.DataFrame
```

In [9]:
```
sd.head() # the head command to see the top 5 items in the csv file
```

Out[9]:

	column_a	column_b	column_c
0	1	1	10
1	2	4	8
2	3	9	6
3	4	16	4
4	5	25	2

In [7]:
```
sd.info() # we'll be able to see all of the available columns in the dataset along
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 5 entries, 0 to 4
Data columns (total 3 columns):
 #   Column    Non-Null Count  Dtype
---  ------    --------------  -----
 0   column_a  5 non-null      int64
 1   column_b  5 non-null      int64
 2   column_c  5 non-null      int64
dtypes: int64(3)
memory usage: 248.0 bytes
```

In [8]:
```
sd.describe() # the index results include the count, mean, std, minimum 25%, 50%, 7
```

Out[8]:

	column_a	column_b	column_c
count	5.000000	5.00000	5.000000
mean	3.000000	11.00000	6.000000
std	1.581139	9.66954	3.162278
min	1.000000	1.00000	2.000000
25%	2.000000	4.00000	4.000000
50%	3.000000	9.00000	6.000000
75%	4.000000	16.00000	8.000000
max	5.000000	25.00000	10.000000

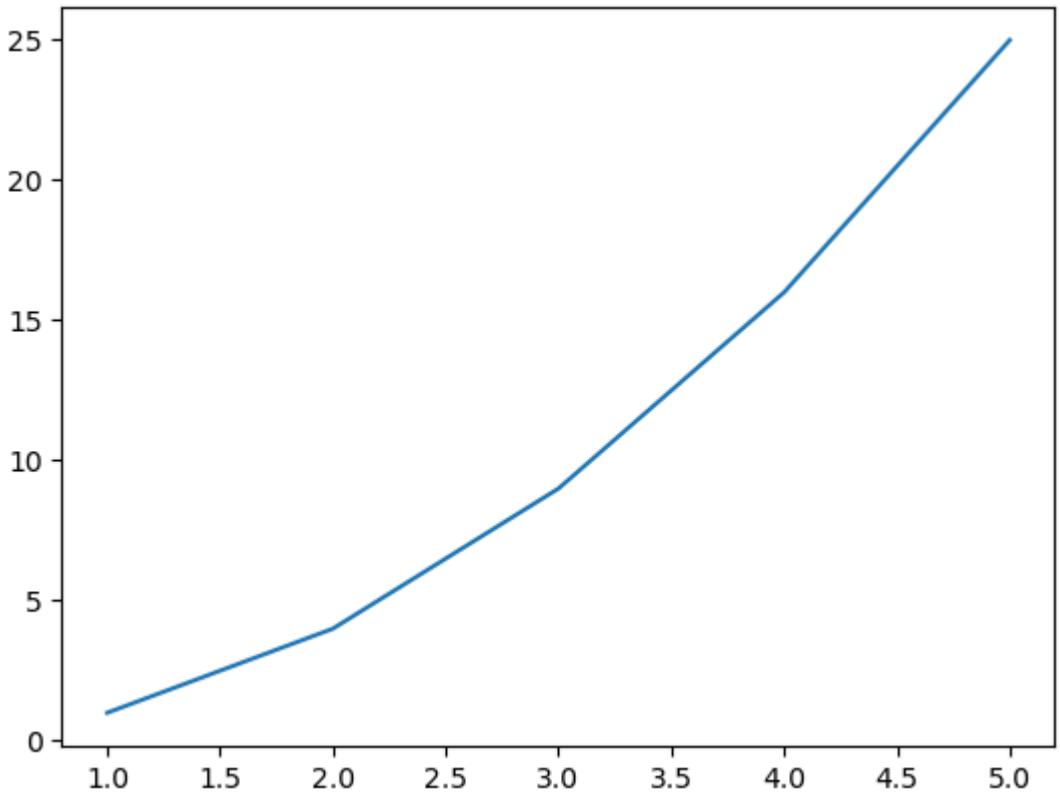
In [9]:
```
sd.column_c #call column c
```

Out[9]:
```
0    10
1     8
2     6
3     4
4     2
Name: column_c, dtype: int64
```

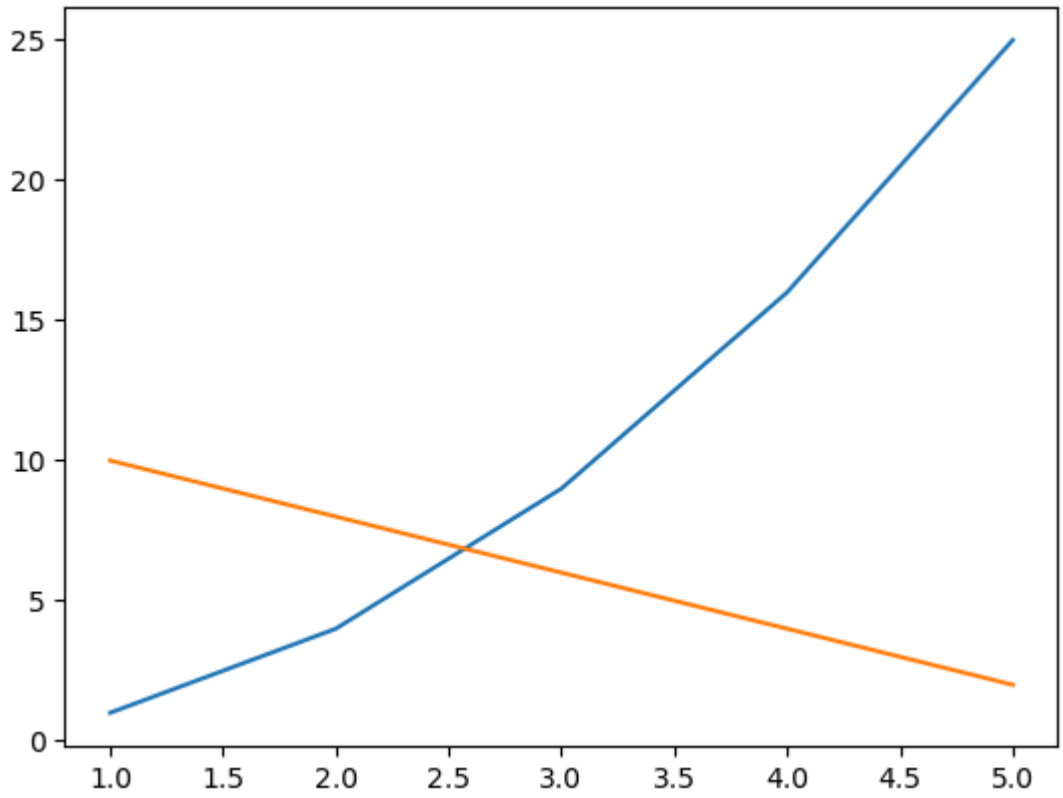
In [10]:
```
 sd.column_c.iloc[0] #retrive the value from column c
```

Out[10]:
```
6
```

In [11]:
```
plt.plot(sd.column_a, sd.column_b) #plot column a and b
plt.show()
```



In [12]:
```
plt.plot(sd.column_a, sd.column_b) #plot column a and b
plt.plot(sd.column_a, sd.column_c) #plot column a and c
plt.show()
```



In [ ]: