In [1]:
```
import pandas as pd
d=pd.read_csv("data.csv")
d
```

Out[1]:

	Name	Subject1	Subject2	Subject3	Subject4	Subject5	Subject6	Subject7	Subject8	Su
0	Aruna	83	92	87	97	88	93	86	89	
1	Bhanu	100	82	87	100	92	93	81	87	
2	Chandrika	88	87	94	91	82	85	88	89	
3	Dhana	82	84	96	86	80	89	86	80	
4	Elisha	95	91	90	98	87	99	88	88	
5	Farha	95	93	99	98	92	98	94	100	
6	Ganga	94	93	92	83	83	88	81	92	
7	Hanuma	96	94	92	94	88	87	84	97	
8	Ishu	87	96	98	81	89	91	91	91	
9	Janaki	88	97	97	96	100	93	80	90	

In [10]:
```
print(d.mean()) # mean of each column
```

```
Subject1     90.8
Subject2     90.9
Subject3     93.2
Subject4     92.4
Subject5     88.1
Subject6     91.6
Subject7     85.9
Subject8     90.3
Subject9     90.9
Subject10    94.1
dtype: float64
```

In [12]:
```
print(d.var())
# variance of each column
```

```
Subject1     36.177778
Subject2     24.988889
Subject3     18.844444
Subject4     46.488889
Subject5     33.655556
Subject6     20.711111
Subject7     20.766667
Subject8     29.788889
Subject9     48.544444
Subject10    26.322222
dtype: float64
```

In [9]:
```
print(d.std())
# standard deviation
```

```
Subject1     6.014797
Subject2     4.998889
Subject3     4.341019
Subject4     6.818276
Subject5     5.801341
Subject6     4.550946
Subject7     4.557046
Subject8     5.457920
Subject9     6.967384
```

In [50]:
```
print(d.mode())
#finding mode
```

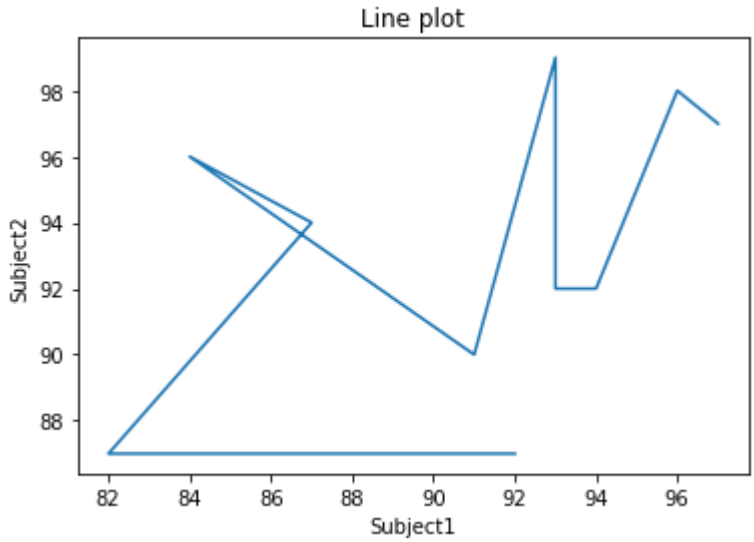
```
        Name  Subject1  Subject2  Subject3  Subject4  Subject5  Subjec
t6  \
0      Aruna      88.0      93.0      87.0      98.0      88.0       9
3.0
1      Bhanu      95.0       NaN      92.0       NaN      92.0        N
aN
2  Chandrika       NaN       NaN       NaN       NaN       NaN        N
aN
3      Dhana       NaN       NaN       NaN       NaN       NaN        N
aN
4     Elisha       NaN       NaN       NaN       NaN       NaN        N
aN
5      Farha       NaN       NaN       NaN       NaN       NaN        N
aN
6      Ganga       NaN       NaN       NaN       NaN       NaN        N
aN
7     Hanuma       NaN       NaN       NaN       NaN       NaN        N
aN
8       Ishu       NaN       NaN       NaN       NaN       NaN        N
aN
9     Janaki       NaN       NaN       NaN       NaN       NaN        N
aN

   Subject7  Subject8  Subject9  Subject10
0      81.0      89.0     100.0       99.0
1      86.0       NaN       NaN        NaN
2      88.0       NaN       NaN        NaN
3       NaN       NaN       NaN        NaN
4       NaN       NaN       NaN        NaN
5       NaN       NaN       NaN        NaN
6       NaN       NaN       NaN        NaN
7       NaN       NaN       NaN        NaN
8       NaN       NaN       NaN        NaN
9       NaN       NaN       NaN        NaN
```

In [14]:
```
import matplotlib.pyplot as plt
```

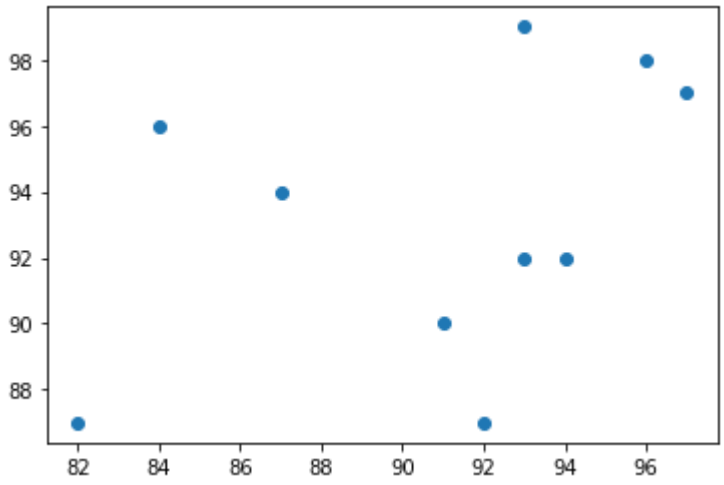
In [49]:
```
e,f=d['Subject2'],d['Subject3']
print(e,f)
plt.title("Line plot")
plt.xlabel("Subject1")
plt.ylabel("Subject2")
plt.plot(e,f)
```

```
 7 plt.show()
 8 #creating lineplot
```

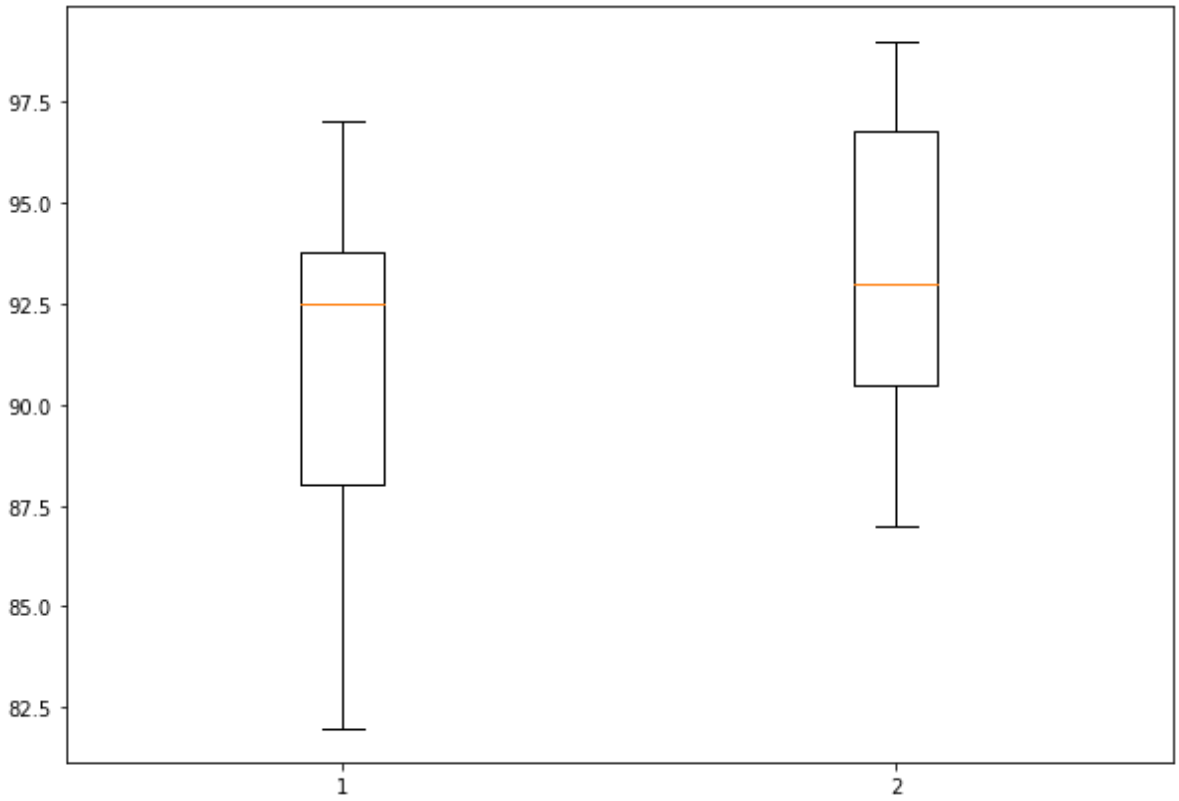
```
0    92
1    82
2    87
3    84
4    91
5    93
6    93
7    94
8    96
9    97
Name: Subject2, dtype: int64 0    87
1    87
2    94
3    96
4    90
5    99
6    92
7    92
8    98
9    97
Name: Subject3, dtype: int64
```



In [48]:
```
plt.scatter(e,f)
plt.show()
# scatterplot
```

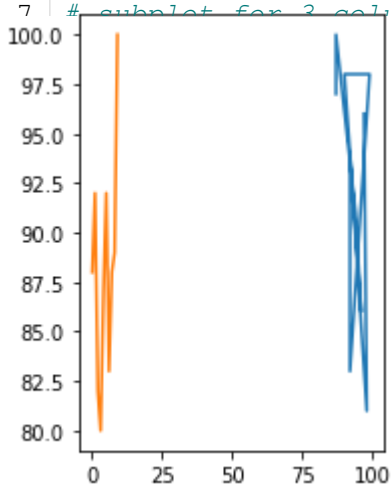


In [46]:
```
# ploting boxplot
data=(e,f)
fig=plt.figure(figsize=(10,7))
plt.boxplot(data)
plt.show()
# boxplot
```



In [45]:
```
#creating subplot
g,h,i=d['Subject3'],d['Subject4'],d['Subject5']
#print(g,h,i)
plt.subplot(1,2,1)
plt.plot(g,h,i)
```

```
6 plt.show()
7 # subplot for 3 columns
```



In [ ]:
```
1
```