In [1]:
```
import seaborn as sns
%matplotlib inline
flights = sns.load_dataset('flights')
tips = sns.load_dataset('tips')
tips.head()
```

Out[1]:

	total_bill	tip	sex	smoker	day	time	size
0	16.99	1.01	Female	No	Sun	Dinner	2
1	10.34	1.66	Male	No	Sun	Dinner	3
2	21.01	3.50	Male	No	Sun	Dinner	3
3	23.68	3.31	Male	No	Sun	Dinner	2
4	24.59	3.61	Female	No	Sun	Dinner	4

In [2]:
```
flights.head()
```

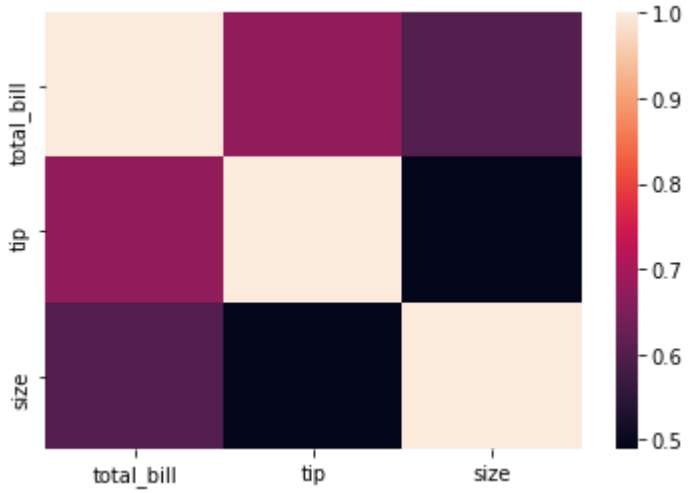
Out[2]:

	year	month	passengers
0	1949	January	112
1	1949	February	118
2	1949	March	132
3	1949	April	129
4	1949	May	121

In [4]:
```
tc=tips.corr()
```

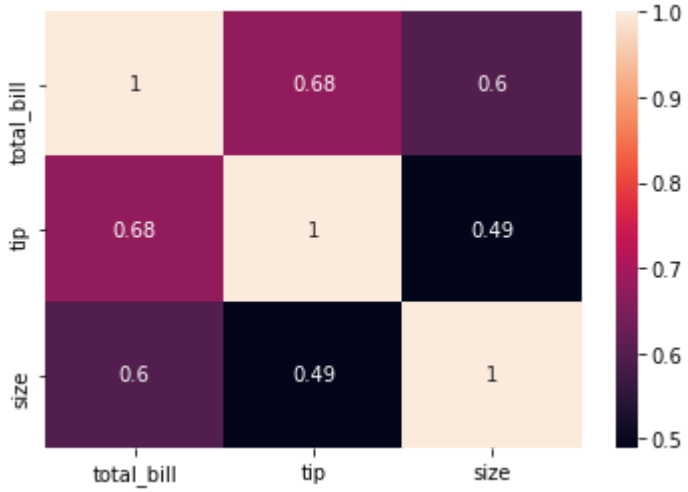
In [5]:
```
sns.heatmap(tc)
```

Out[5]:
```
<matplotlib.axes._subplots.AxesSubplot at 0x51fbdd8>
```



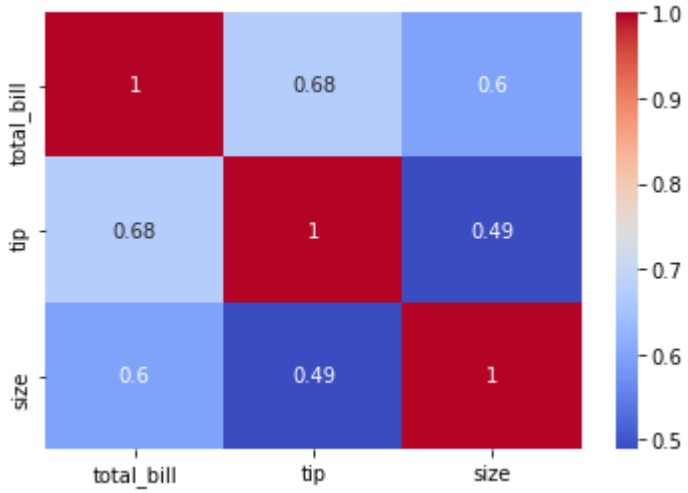
In [6]:
```
sns.heatmap(tc,annot=True)
```

Out[6]: <matplotlib.axes._subplots.AxesSubplot at 0x4c26f28>



In [7]:
```
sns.heatmap(tc,annot=True,cmap='coolwarm')
```

Out[7]: <matplotlib.axes._subplots.AxesSubplot at 0x9abda90>



In [8]:
```
flights
```

Out[8]:

	year	month	passengers
0	1949	January	112
1	1949	February	118
2	1949	March	132
3	1949	April	129
4	1949	May	121
5	1949	June	135
6	1949	July	148
7	1949	August	148
8	1949	September	136
9	1949	October	119
10	1949	November	104
11	1949	December	118
12	1950	January	115
13	1950	February	126
14	1950	March	141
15	1950	April	135
16	1950	May	125
17	1950	June	149
18	1950	July	170
19	1950	August	170
20	1950	September	158
21	1950	October	133
22	1950	November	114
23	1950	December	140
24	1951	January	145
25	1951	February	150
26	1951	March	178
27	1951	April	163
28	1951	May	172
29	1951	June	178
...	...	...	...
114	1958	July	491
115	1958	August	505

	year	month	passengers
116	1958	September	404
117	1958	October	359
118	1958	November	310
119	1958	December	337
120	1959	January	360
121	1959	February	342
122	1959	March	406
123	1959	April	396
124	1959	May	420
125	1959	June	472
126	1959	July	548
127	1959	August	559
128	1959	September	463
129	1959	October	407
130	1959	November	362
131	1959	December	405
132	1960	January	417
133	1960	February	391
134	1960	March	419
135	1960	April	461
136	1960	May	472
137	1960	June	535
138	1960	July	622
139	1960	August	606
140	1960	September	508
141	1960	October	461
142	1960	November	390
143	1960	December	432

144 rows × 3 columns

In [9]:
```
flights.pivot_table(index='month',columns='year',values='passengers')
```

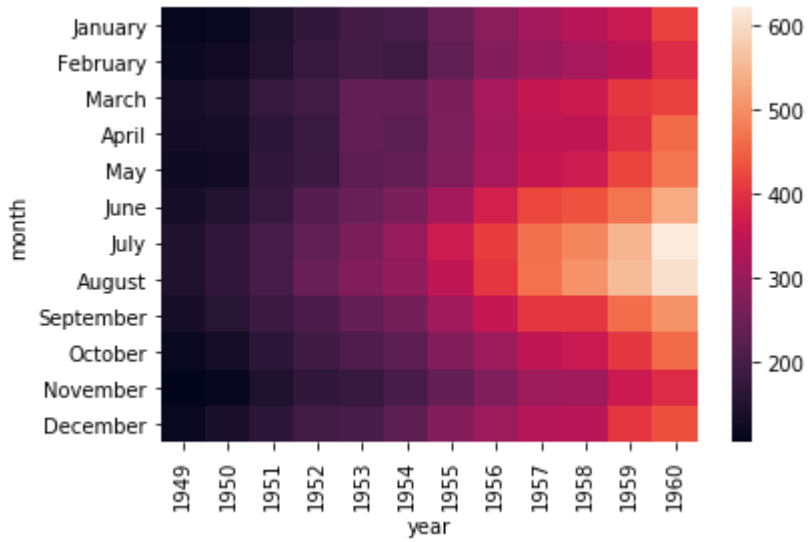
Out[9]:

year	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
month												
January	112	115	145	171	196	204	242	284	315	340	360	417
February	118	126	150	180	196	188	233	277	301	318	342	391
March	132	141	178	193	236	235	267	317	356	362	406	419
April	129	135	163	181	235	227	269	313	348	348	396	461
May	121	125	172	183	229	234	270	318	355	363	420	472
June	135	149	178	218	243	264	315	374	422	435	472	535
July	148	170	199	230	264	302	364	413	465	491	548	622
August	148	170	199	242	272	293	347	405	467	505	559	606
September	136	158	184	209	237	259	312	355	404	404	463	508
October	119	133	162	191	211	229	274	306	347	359	407	461
November	104	114	146	172	180	203	237	271	305	310	362	390
December	118	140	166	194	201	229	278	306	336	337	405	432

In [10]:
```
fp=flights.pivot_table(index='month',columns='year',values='passengers')
```

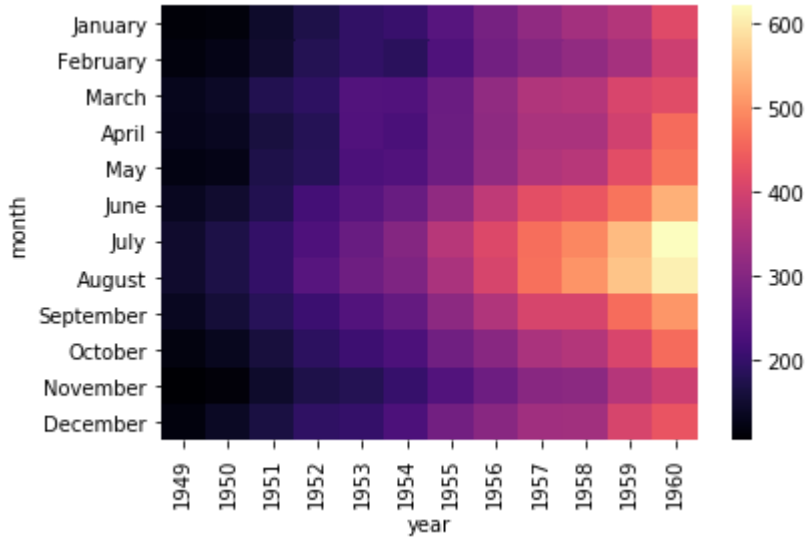
In [11]:
```
sns.heatmap(fp)
```

Out[11]:
```
<matplotlib.axes._subplots.AxesSubplot at 0x9af76d8>
```



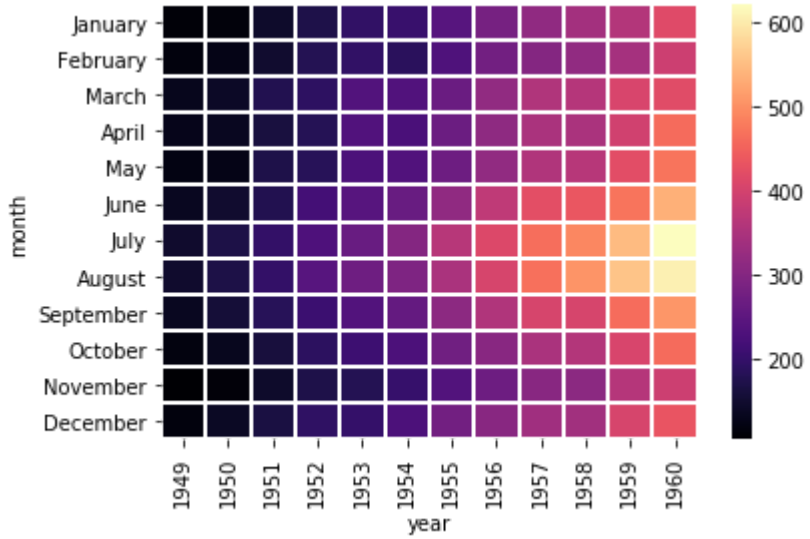
In [12]:
```
sns.heatmap(fp,cmap='magma')
```

Out[12]:
```
<matplotlib.axes._subplots.AxesSubplot at 0x9ad8630>
```



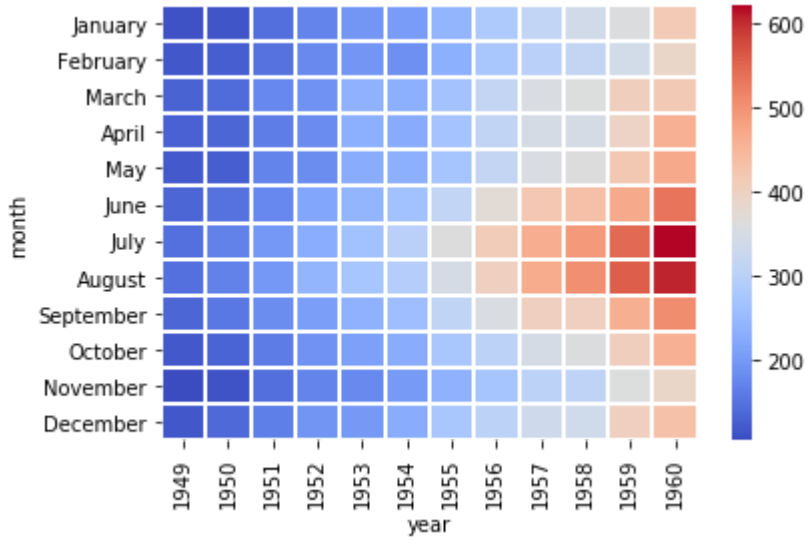
In [13]:
```
sns.heatmap(fp,cmap='magma',linecolor='white',linewidths='1')
```

Out[13]:
```
<matplotlib.axes._subplots.AxesSubplot at 0x9607fd0>
```



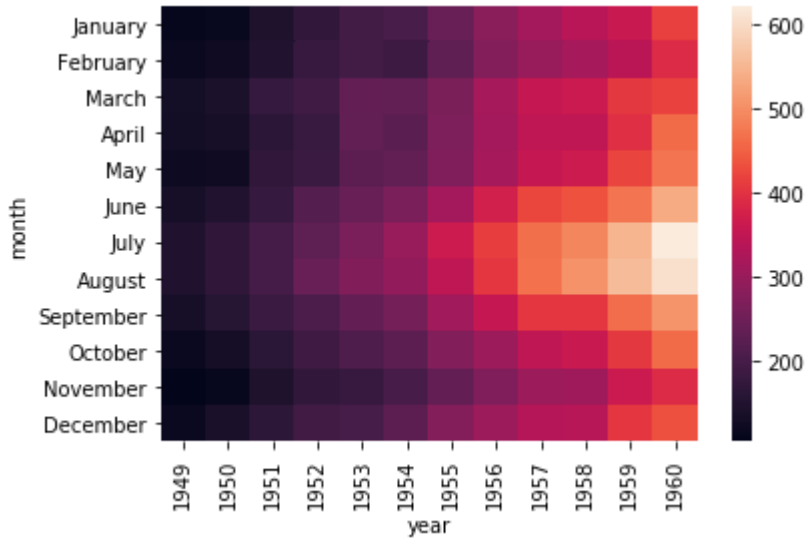
In [14]:
```
sns.heatmap(fp,cmap='coolwarm',linecolor='white',linewidths='1')
```

Out[14]: <matplotlib.axes._subplots.AxesSubplot at 0x9af7780>



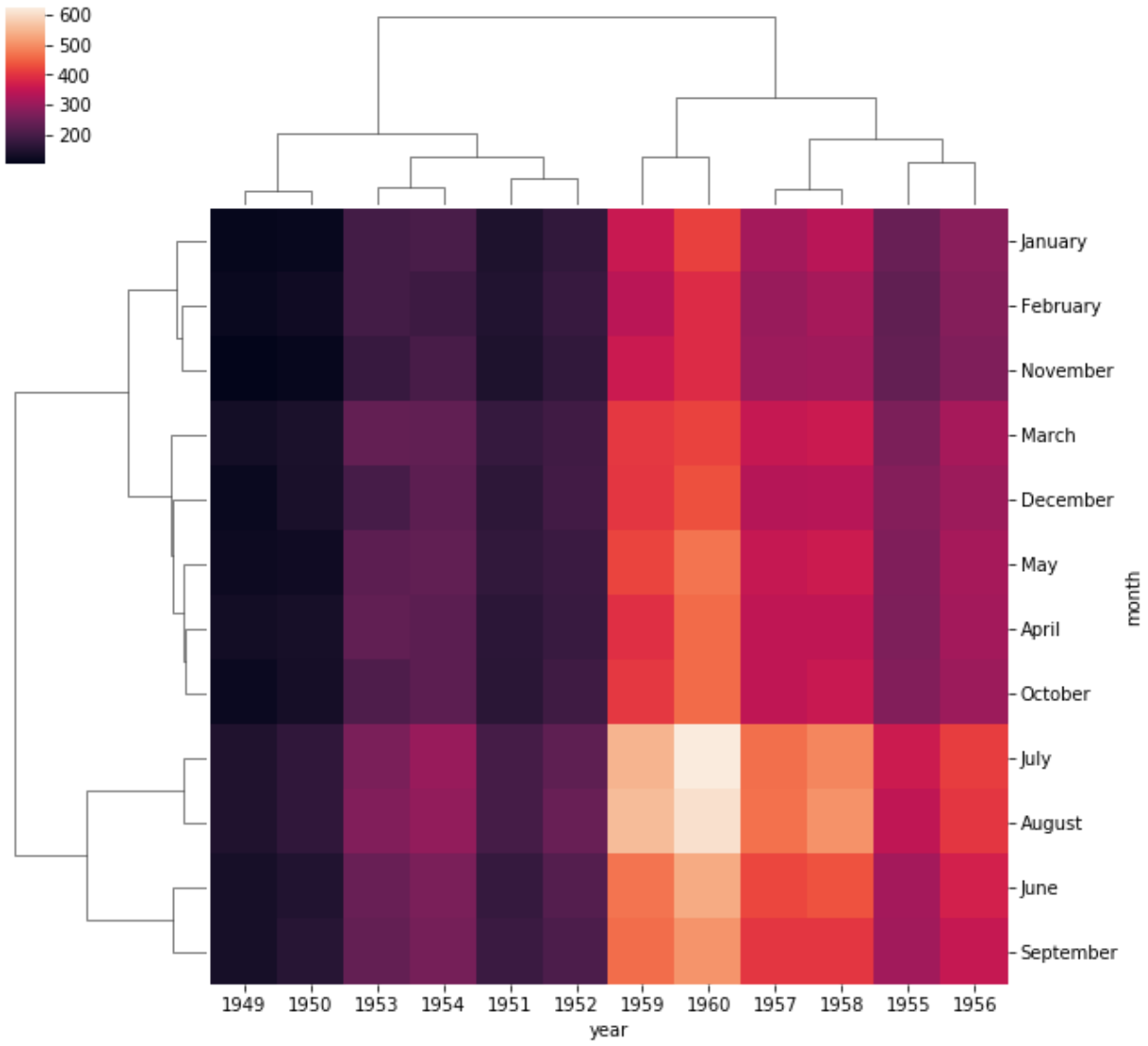
In [15]:
```
sns.heatmap(fp)
```

Out[15]: <matplotlib.axes._subplots.AxesSubplot at 0x9b78f60>



In [16]:
```
sns.clustermap(fp)
```

Out[16]: <seaborn.matrix.ClusterGrid at 0xa483a20>



In [ ]: