Heatmaps

A heat map is a graphical representation of data where the individual values contined in a matrix are represented as colors.

(generally drawn between two categorical data, but sumtime drawn discrete numerical data)

In [23]:
```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
```

In [24]:
```
plt.style.use('fivethirtyeight')
```

In [25]:
```
flights=sns.load_dataset('flights')
```

In [26]:
```
flights.head()
```

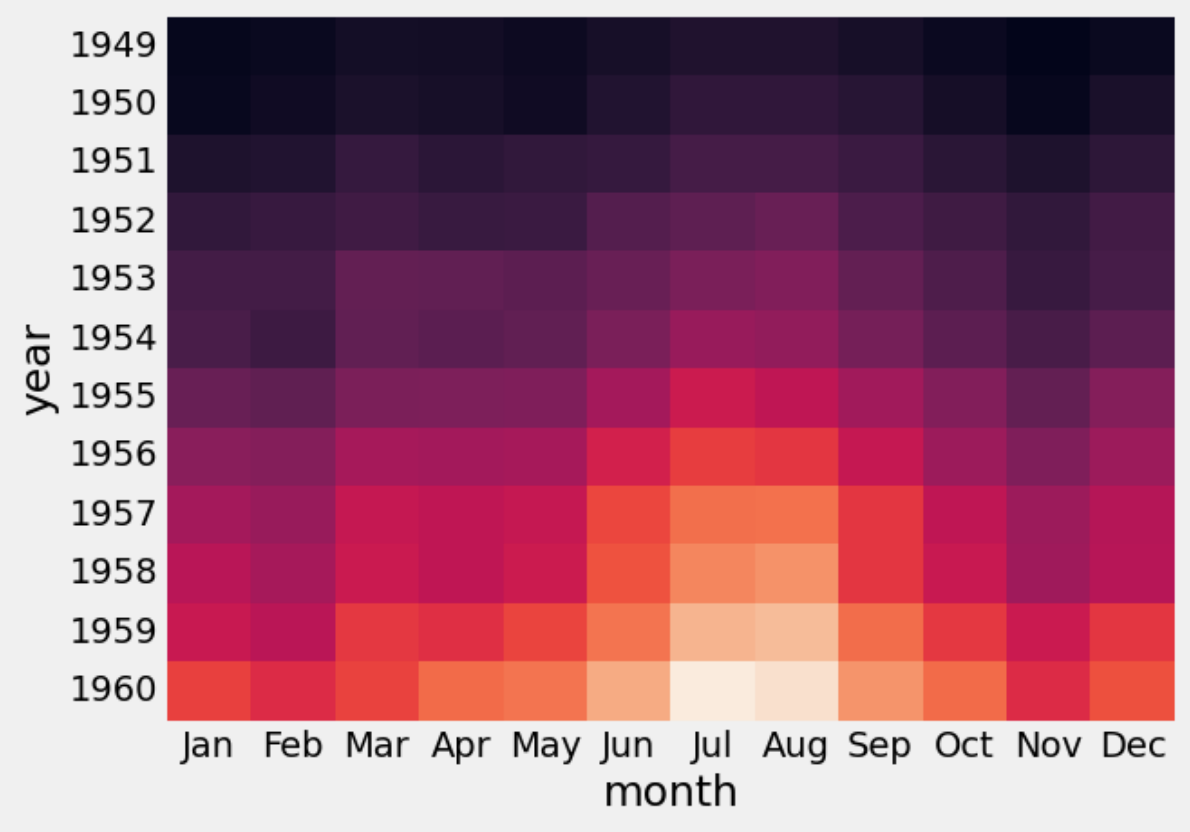
Out[26]:

	year	month	passengers
0	1949	Jan	112
1	1949	Feb	118
2	1949	Mar	132
3	1949	Apr	129
4	1949	May	121

In [27]:
```
x=flights.pivot_table
(index='year', columns='month',
                      values='passengers', aggfunc='sum')
```

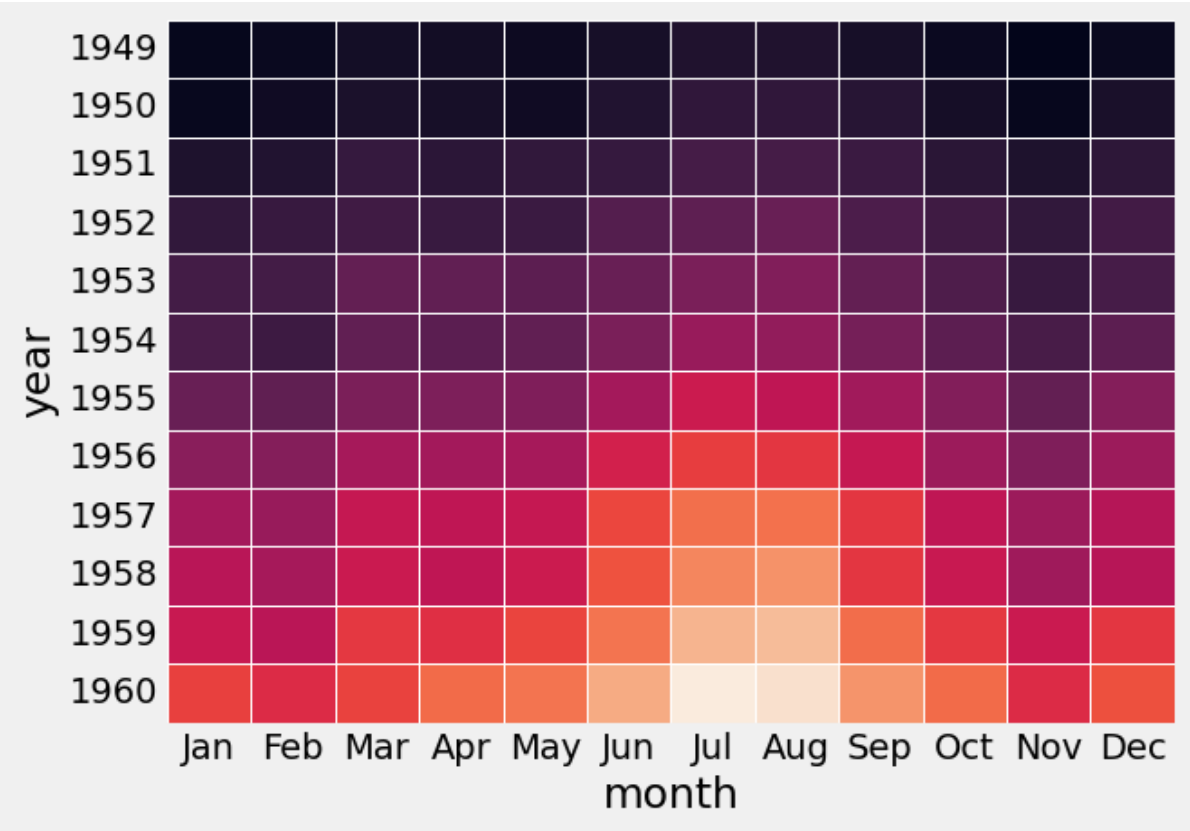
In [28]:
```
sns.heatmap(x, cbar=False)
```

Out[28]:
```
<Axes: xlabel='month', ylabel='year'>
```



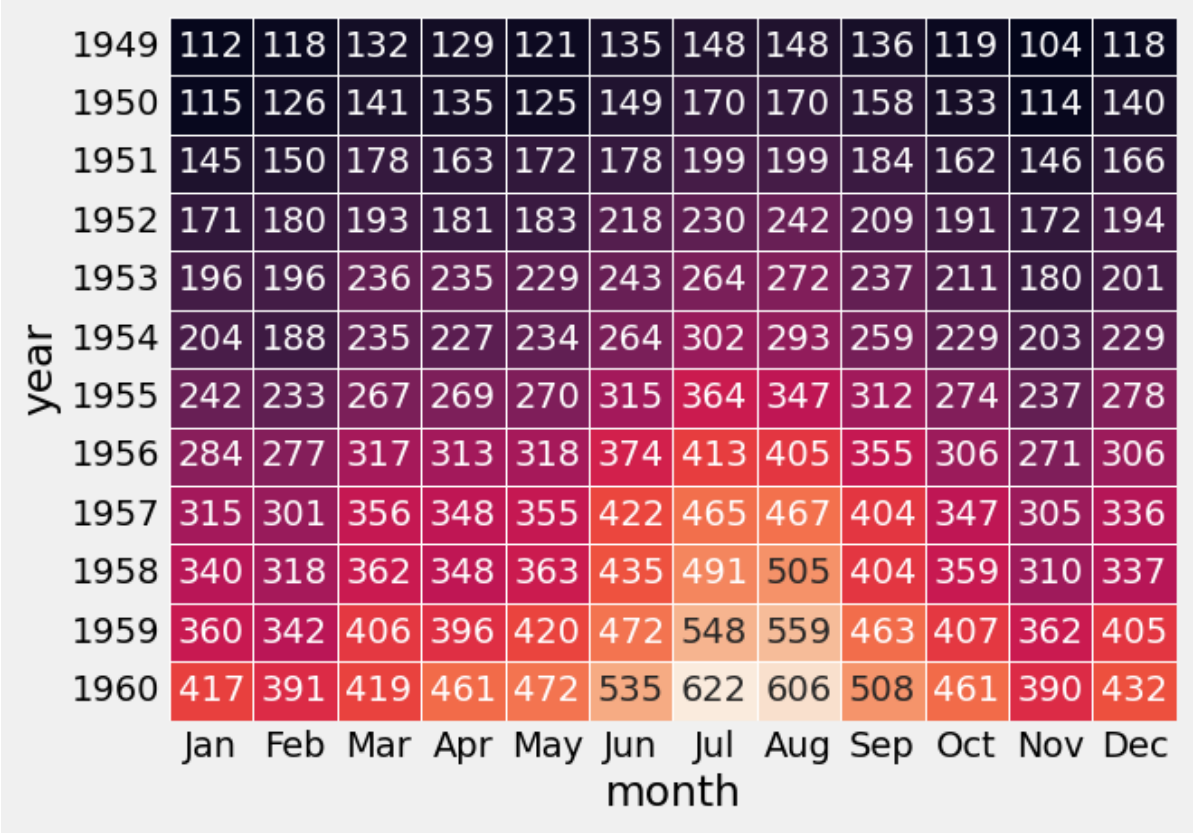
In [29]:
```
sns.heatmap(x, cbar=False, linewidths=0.5)
```

Out[29]:
```
<Axes: xlabel='month', ylabel='year'>
```



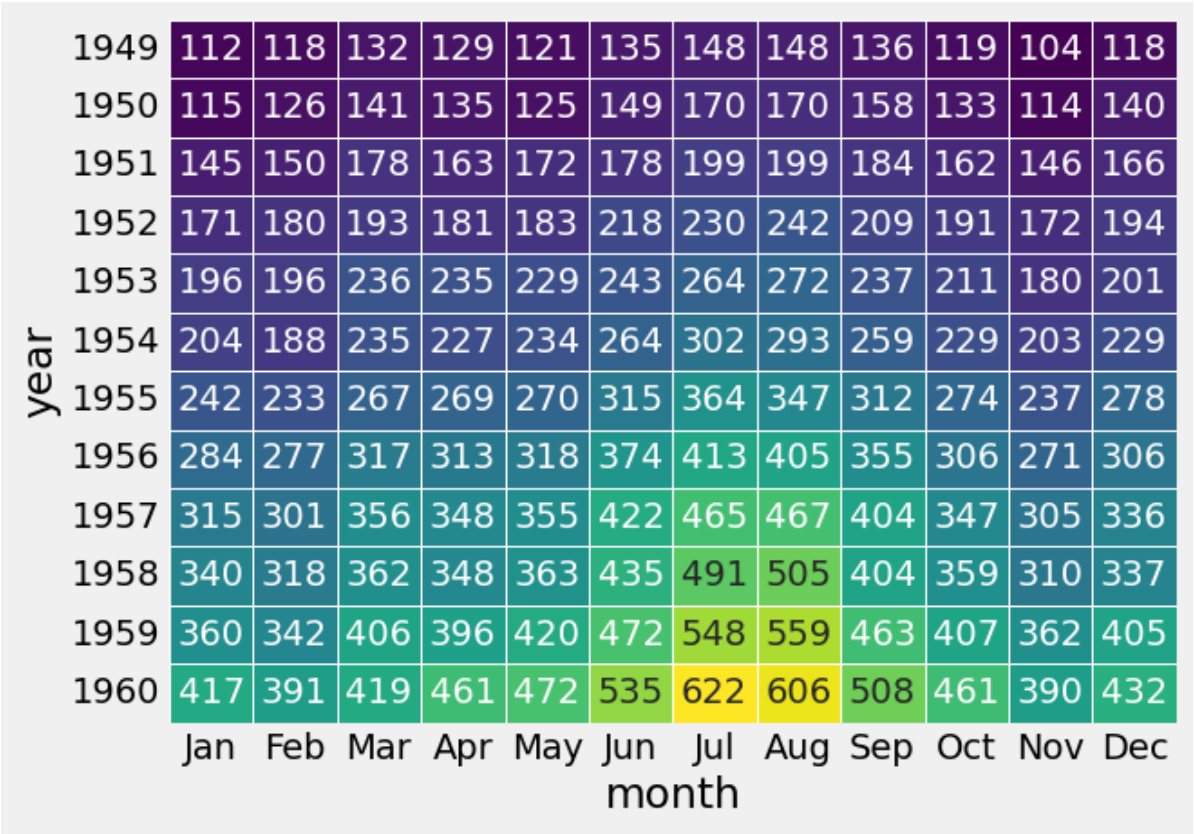
In [30]:
```
sns.heatmap(x, cbar=False, linewidths=0.5, annot=True, fmt='d')
```

Out[30]:
```
<Axes: xlabel='month', ylabel='year'>
```



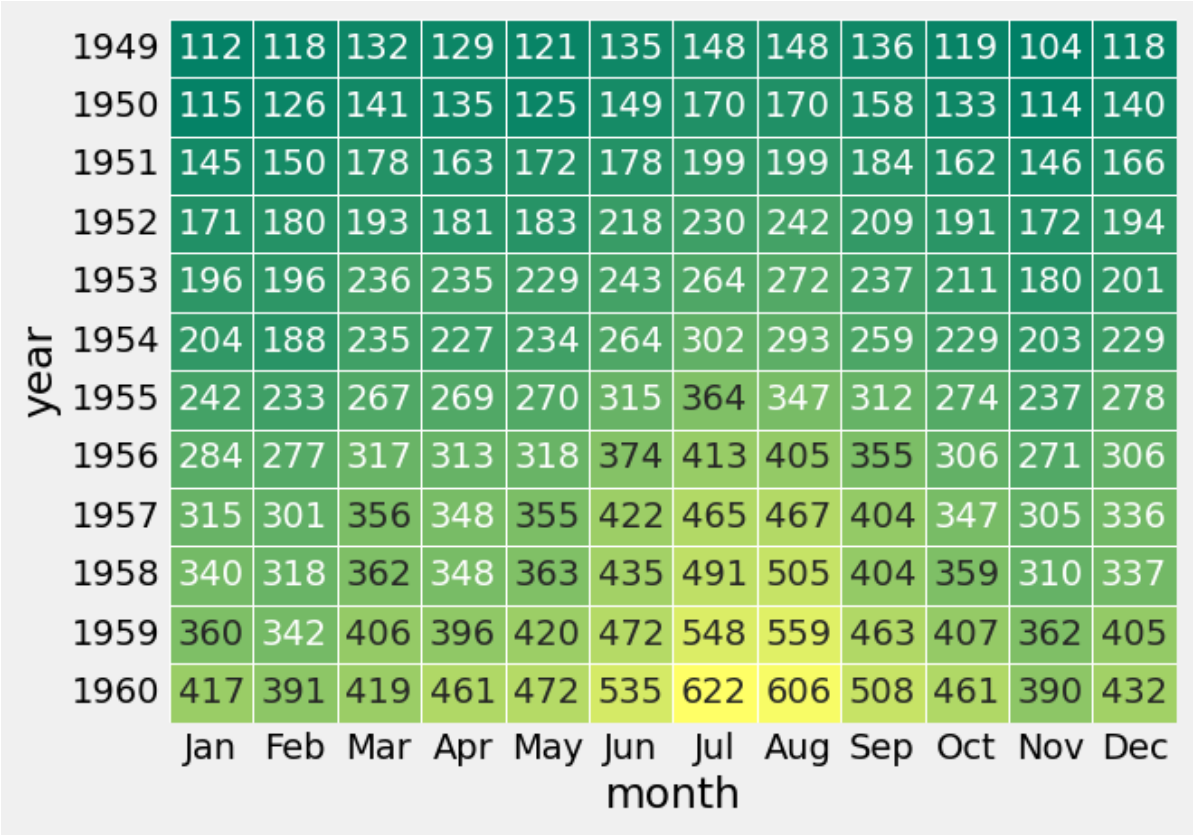
In [31]:
```
sns.heatmap(x, cbar=False, linewidths=0.5, annot=True, fmt='d', cmap='viridis')
```

Out[31]:
```
<Axes: xlabel='month', ylabel='year'>
```



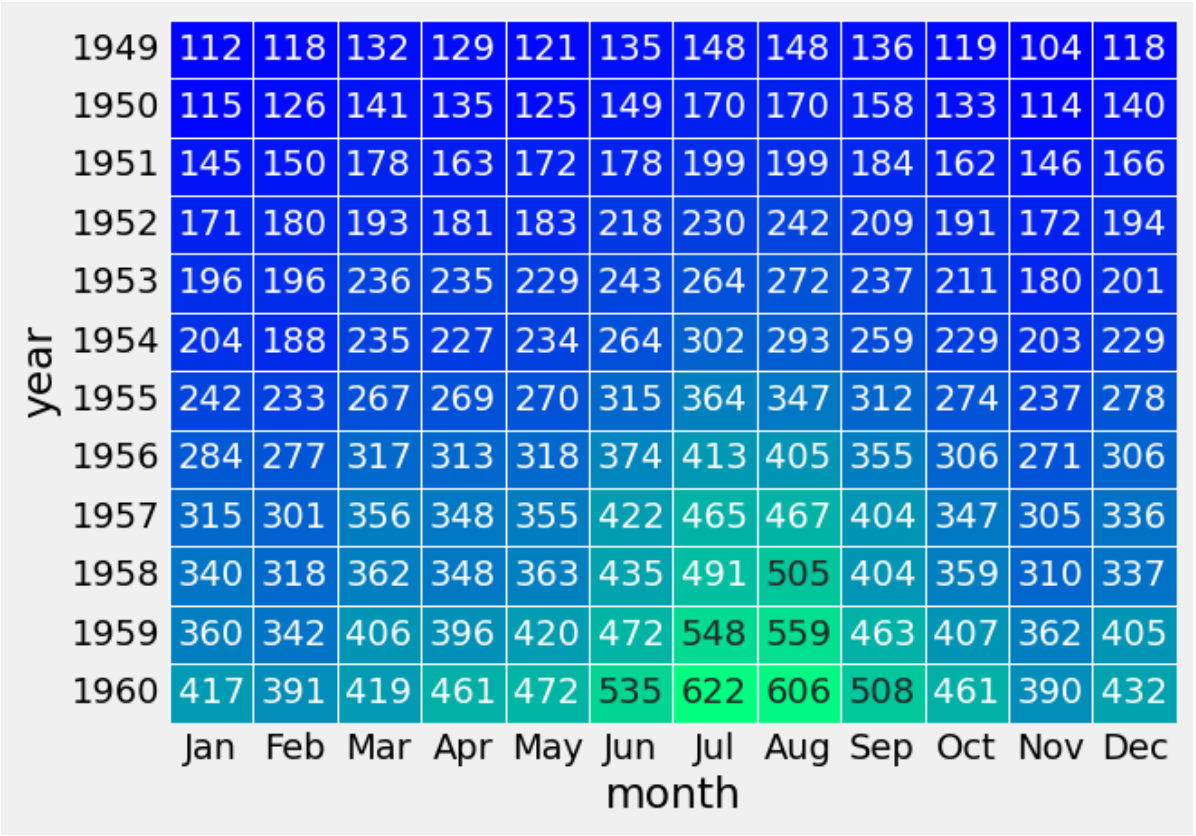
In [32]:
```
sns.heatmap(x, cbar=False, linewidths=0.5, annot=True, fmt='d', cmap='summer')
```

Out[32]:
```
<Axes: xlabel='month', ylabel='year'>
```



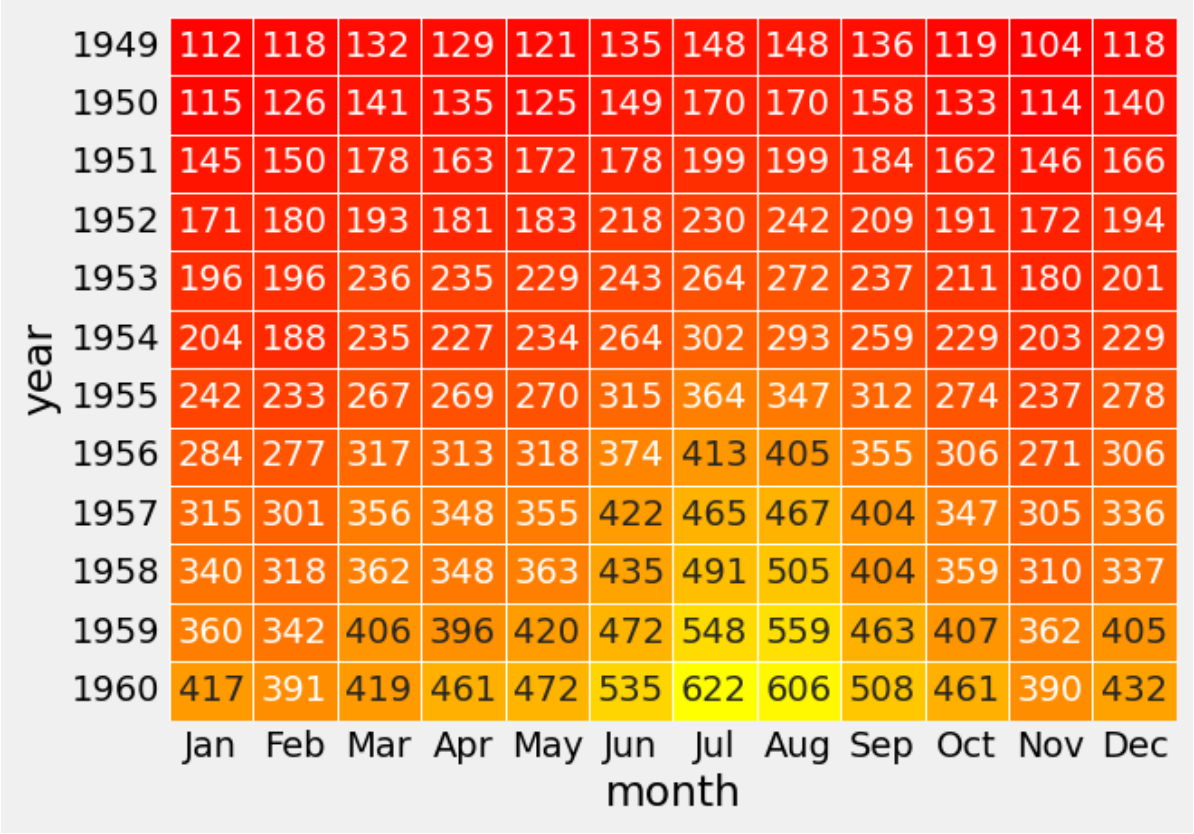
In [33]:
```
sns.heatmap(x, cbar=False, linewidths=0.5, annot=True, fmt='d', cmap='winter')
```

Out[33]:
```
<Axes: xlabel='month', ylabel='year'>
```



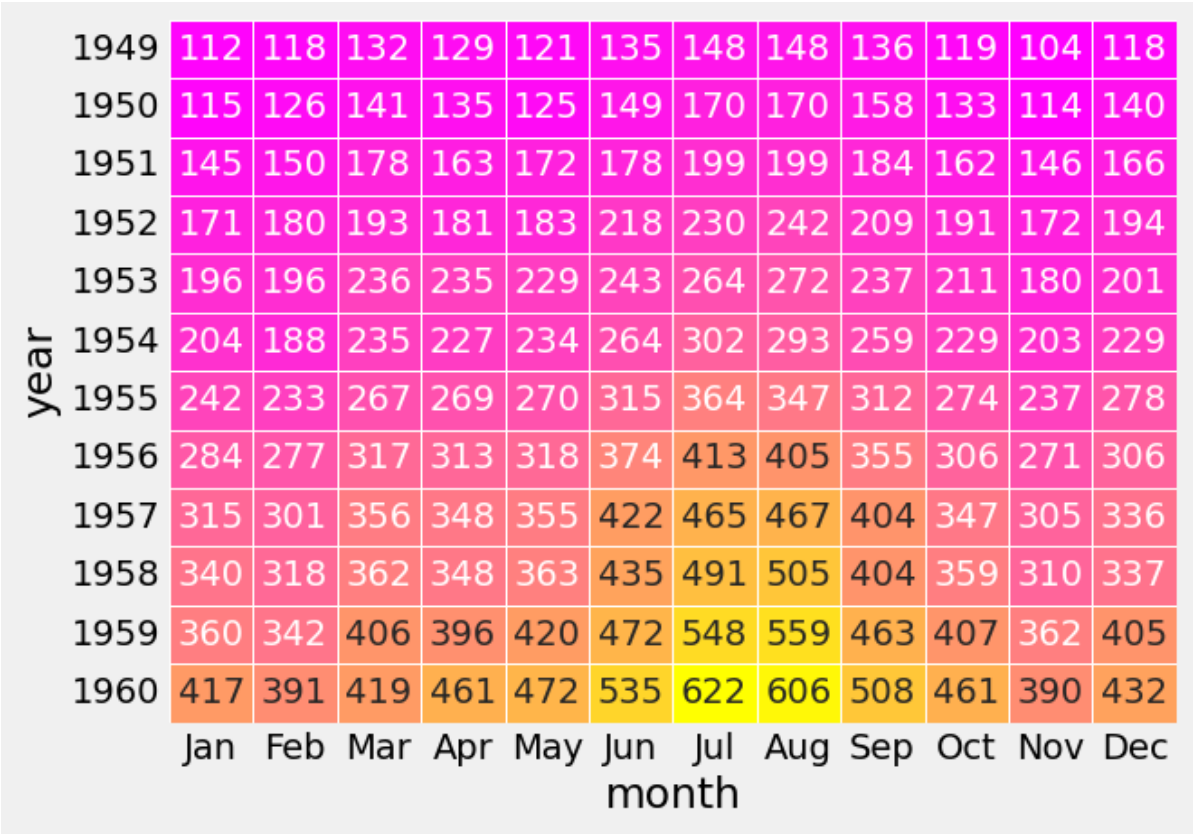
In [34]:
```
sns.heatmap(x, cbar=False, linewidths=0.5, annot=True, fmt='d', cmap='autumn')
```

Out[34]:
```
<Axes: xlabel='month', ylabel='year'>
```



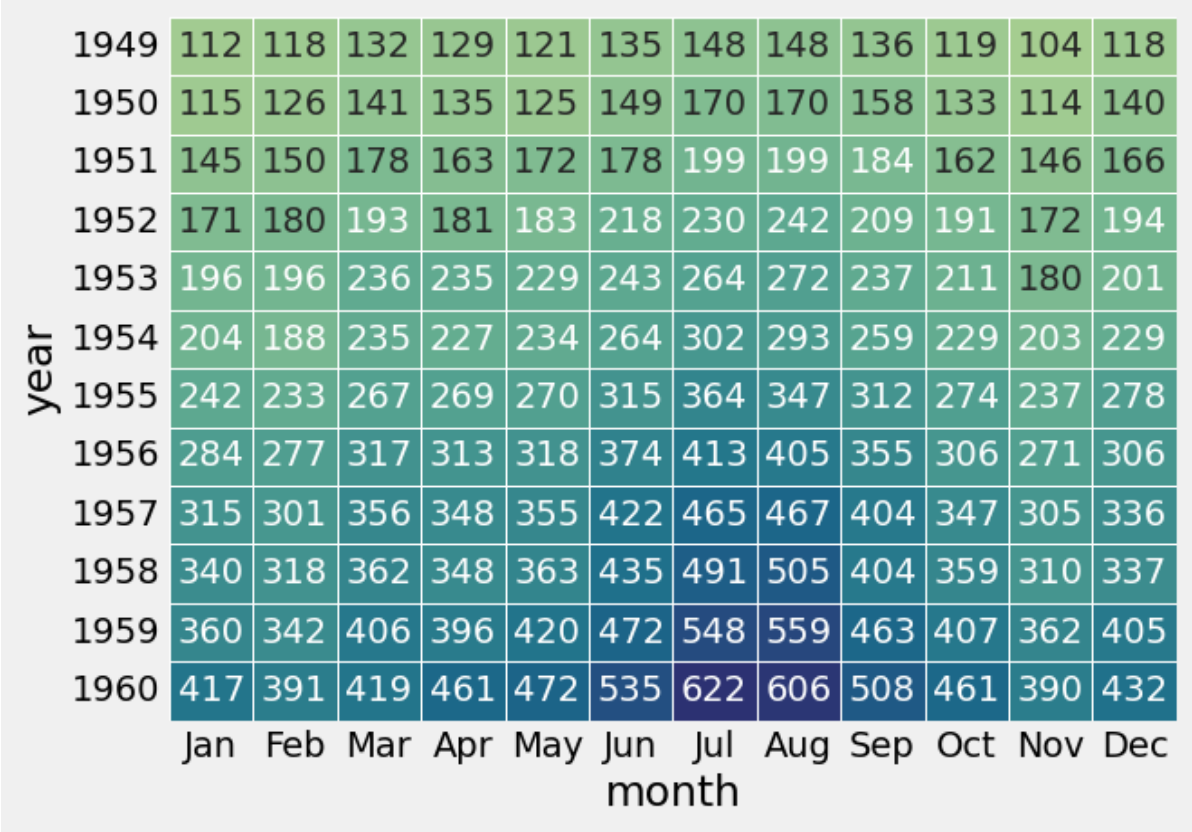
In [35]:
```
sns.heatmap(x, cbar=False, linewidths=0.5, annot=True, fmt='d', cmap='spring')
```

Out[35]:
```
<Axes: xlabel='month', ylabel='year'>
```



In [36]:
```
sns.heatmap(x, cbar=False, linewidths=0.5, annot=True, fmt='d', cmap='crest')
```

Out[36]:
```
<Axes: xlabel='month', ylabel='year'>
```


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

In [ ]:

In [ ]: