

In [2]:

```
#import matplotlib library
import matplotlib.pyplot as plt

#import seaborn library
import seaborn as sns
```

C:\Users\LENOVO\anaconda3\lib\site-packages\scipy__init__.py:138: UserWarning: A NumPy version >=1.16.5 and <1.23.0 is required for this version of SciPy (detected version 1.24.1)
warnings.warn(f"A NumPy version >={np_minversion} and <{np_maxversion} is required for this version of "

In [3]:

```
# To show plot on notebook
%matplotlib inline
```

In [4]:

```
# Load flights data from sns dataset
flight_data = sns.load_dataset('flights')
```

In [5]:

```
# view top 5 records
flight_data.head()
```

Out[5]:

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

In [6]:

```
# use pivot method to re-arrange the dataset
flight_data = flight_data.pivot('month','year','passengers')
```

<ipython-input-6-3639414cd1a7>:2: FutureWarning: In a future version of pandas all arguments of DataFrame.pivot will be key word-only.
flight_data = flight_data.pivot('month','year','passengers')

In [7]:

```
#view the dataset
flight_data
```

Out[7]:

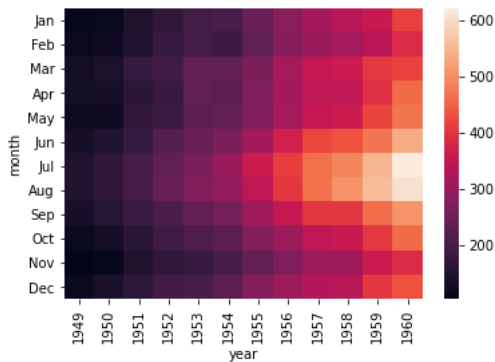
	year	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
month													
Jan		112	115	145	171	196	204	242	284	315	340	360	417
Feb		118	126	150	180	196	188	233	277	301	318	342	391
Mar		132	141	178	193	236	235	267	317	356	362	406	419
Apr		129	135	163	181	235	227	269	313	348	348	396	461
May	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

In [8]:

```
# use heatmap method to generate the heatmap of the flights data
sns.heatmap(flight_data)
```

Out[8]:

```
<AxesSubplot: xlabel='year', ylabel='month'>
```



Pie chart

In [13]:

```
# import required libraries
import matplotlib.pyplot as plt
%matplotlib inline
```

In [14]:

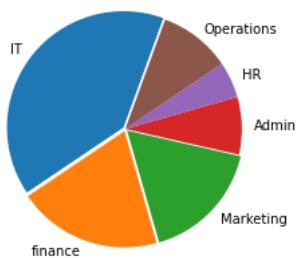
```
# job data in percentile
job_data = ['40%', '20%', '17%', '8%', '5%', '10%']

# define label as different departments
labels = 'IT', 'finance', 'Marketing', 'Admin', 'HR', 'Operations'

#explode the 1st slice which is IT
explode = (0.02, 0.02, 0.02, 0.02, 0.02, 0.02)

# draw the pie chart and set the parameters
plt.pie(job_data, labels=labels, explode=explode, startangle=70)

#show the plot
plt.show()
```



In []:

In []: