```python
import pandas as pd
import matplotlib.pyplot as plt
import numpy as np

df = pd.read_csv('/Users/crisyuriok/Library/CloudStorage/OneDrive-Persona
                 sep = ',',
                 decimal=',',
                 encoding='utf-8')

print(df.head())
print(df.shape)
print(df.columns)
display(df.dtypes)
```

```
   show_id     type                                            title  \
0       s1    Movie  Duck the Halls: A Mickey Mouse Christmas Special
1       s2    Movie                            Ernest Saves Christmas
2       s3    Movie                         Ice Age: A Mammoth Christmas
3       s4    Movie                         The Queen Family Singalong
4       s5  TV Show                            The Beatles: Get Back

                          director  \
0  Alonso Ramirez Ramos, Dave Wasson
1                       John Cherry
2                      Karen Disher
3                   Hamish Hamilton
4                               NaN

                                                cast        country  \
0  Chris Diamantopoulos, Tony Anselmo, Tress MacN...            NaN
1             Jim Varney, Noelle Parker, Douglas Seale            NaN
2  Raymond Albert Romano, John Leguizamo, Denis L...  United States
3  Darren Criss, Adam Lambert, Derek Hough, Alexa...            NaN
4  John Lennon, Paul McCartney, George Harrison, ...            NaN

          date_added  release_year rating  duration  \
0  November 26, 2021          2016   TV-G    23 min
1  November 26, 2021          1988     PG    91 min
2  November 26, 2021          2011   TV-G    23 min
3  November 26, 2021          2021  TV-PG    41 min
4  November 25, 2021          2021    NaN  1 Season

                      listed_in  \
0              Animation, Family
1                         Comedy
2      Animation, Comedy, Family
3                        Musical
4  Docuseries, Historical, Music

                                         description
0   Join Mickey and the gang as they duck the halls!
1  Santa Claus passes his magic bag to a new St. ...
2          Sid the Sloth is on Santa's naughty list.
3                This is real life, not just fantasy!
4  A three-part documentary from Peter Jackson ca...
(1450, 12)
Index(['show_id', 'type', 'title', 'director', 'cast', 'country', 'date_ad
ded',
       'release_year', 'rating', 'duration', 'listed_in', 'description'],
      dtype='object')
show_id         object
type            object
title           object
director        object
cast            object
country         object
date_added      object
release_year     int64
rating          object
duration        object
listed_in       object
description     object
dtype: object
```

```python
import pandas as pd
import matplotlib.pyplot as plt
import numpy as np
import matplotlib.pyplot as plt

# Criação do gráfico de barras
categorias = df['listed_in'].value_counts()


plt.figure(figsize=(14,80))
plt.barh(categorias.index, categorias.values)

# Dados no eixo x
plt.yticks(df['listed_in'])

# Nome do eixo Y
plt.ylabel('Categoria')

# Nome do eixo X
plt.xlabel('Contagem')

#Títlo do gráfco
plt.title('Categorias')

# Apresentação da figura
plt.show()
```
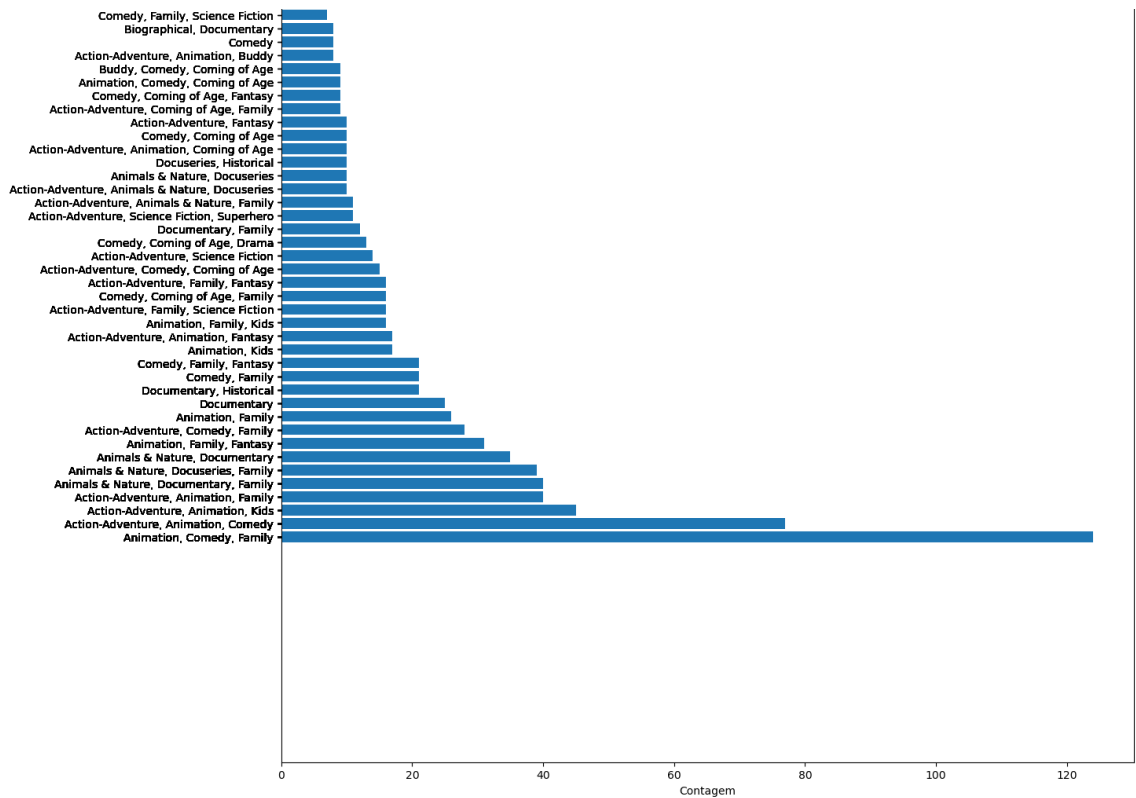
Categorias

Action-Adventure, Animals & Nature, Animation
Buddy, Docuseries
Comedy, Family, Lifestyle
Dance, Music, Musical
Animals & Nature, Family, Reality
Docuseries, Kids
Comedy, Parody, Science Fiction
Docuseries, Historical, Reality
Drama, Romance
Animals & Nature, Documentary, Survival
Action-Adventure, Crime, Science Fiction
Biographical, Drama, Music
Animals & Nature, Kids, Music
Drama, Music, Romance
Fantasy, Variety
Action-Adventure, Fantasy, Musical
Action-Adventure, Docuseries, Fantasy
Family, Game Show / Competition, Reality
Drama, Fantasy, Mystery
Anthology, Documentary
Comedy, Family, Variety
Documentary, Music
Biographical, Historical, Musical
Animation, Documentary, Family
Action-Adventure, Crime, Fantasy
Action-Adventure, Documentary, Historical
Coming of Age, Documentary, Drama
Docuseries, Science Fiction
Animals & Nature, Family, Sports
Biographical, Comedy, Family
Coming of Age, Drama, Science Fiction
Animation, Family, Romance
Buddy, Comedy, Drama
Comedy, Fantasy, Romance
Docuseries, Family, Lifestyle
Action-Adventure, Disaster, Drama
Animation, Family, Historical
Animals & Nature, Family
Concert Film, Music, Musical
Docuseries, Family, Game Show / Competition
Comedy, Musical, Romance
Animation, Comedy, Crime
Crime, Drama, Mystery
Coming of Age, Fantasy, Mystery
Drama, Family, Historical
Comedy, Coming of Age, Medical
Variety
Buddy, Docuseries, Lifestyle
Family, Fantasy, Mystery
Game Show / Competition, Sports, Variety
Animation, Buddy, Kids
Comedy, Drama
Animation, Kids, Police/Cop
Action-Adventure, Family, Parody
Comedy, Drama, Thriller
Crime, Drama
Animation, Fantasy, Musical
Comedy, Romance, Romantic Comedy
Animation, Anthology, Science Fiction
Talk Show
Animation, Science Fiction
Animals & Nature, Reality
Animation, Crime, Family
Animation, Drama
Coming of Age, Music
Lifestyle
Animals & Nature
Action-Adventure, Superhero
Docuseries, Historical, Music
Musical
Animals & Nature, Docuseries, Medical
Action-Adventure, Buddy, Comedy
Action-Adventure, Docuseries, Reality
Comedy, Sports
Buddy, Comedy, Docuseries
Action-Adventure, Buddy, Science Fiction
Comedy, Reality
Animals & Nature, Comedy
Action-Adventure, Fantasy, Survival
Action-Adventure, Biographical, Drama
Biographical, Coming of Age, Drama
Family, Kids
Animals & Nature, Anthology
Musical, Romance, Western
Anthology, Science Fiction
Animation, Comedy, Parody
Action-Adventure, Family, Game Show / Competition
Animals & Nature, Animation, Kids
Animation, Superhero
Animation, Dance, Family
Action-Adventure, Drama, Historical
Action-Adventure, Docuseries, Lifestyle
Action-Adventure, Comedy, Spy/Espionage
Biographical, Coming of Age, Family
Action-Adventure, Reality, Survival
Comedy, Docuseries, Family
Concert Film, Family, Fantasy
Comedy, Variety
Animals & Nature, Animation, Family
Comedy, Crime, Fantasy
Anthology, Comedy, Kids
Action-Adventure, Documentary
Action-Adventure, Documentary, Superhero
Action-Adventure, Coming of Age
Animals & Nature, Documentary, Medical
Coming of Age, Family, Musical
Coming of Age, Musical
Coming of Age, Musical, Romance
Comedy, Family, Romantic Comedy
Animation, Family, Music
Coming of Age, Dance, Drama
Drama, Mystery
Action-Adventure, Coming of Age, Fantasy
Action-Adventure, Documentary, Sports
Drama, Parody, Science Fiction
Music, Reality
Action-Adventure, Crime, Family
Comedy, Coming of Age, Sports
Action-Adventure, Animals & Nature, Comedy
Animals & Nature, Docuseries, Travel
Kids
Animals & Nature, Coming of Age, Family
Biographical, Family, Historical
Action-Adventure, Drama, Family
Animation, Drama, Fantasy
Action-Adventure, Comedy
Buddy, Comedy, Romance
Comedy, Music
Comedy, Crime, Science Fiction
Crime, Drama, Family
Action-Adventure, Family, Western
Animation, Anthology, Kids
Action-Adventure, Science Fiction, Thriller
Buddy, Coming of Age, Family
Action-Adventure, Western
Action-Adventure, Family, Survival

Categoria

- Action-Adventure, Family, Survival
- Fantasy, Kids, Mystery
- Action-Adventure, Family, Mystery
- Animation, Buddy, Family
- Buddy, Family, Sports
- Family, Fantasy
- Anthology, Comedy, Family
- Docuseries, Family, Medical
- Coming of Age, Dance, Sports
- Biographical, Comedy, Drama
- Animation, Anthology, Fantasy
- Coming of Age, Musical, Science Fiction
- Comedy, Mystery
- Animation, Drama, Kids
- Documentary, Family, Reality
- Buddy, Comedy, Family
- Comedy, Family, Game Show / Competition
- Sports
- Buddy, Coming of Age, Drama
- Anthology, Family, Lifestyle
- Animation, Family, Mystery
- Animation, Kids, Parody
- Documentary, Family, Variety
- Drama, Family, Musical
- Coming of Age, Docuseries, Family
- Fantasy, Musical, Thriller
- Drama, Family, Mystery
- Animation, Comedy, Disaster
- Family, Fantasy, Romance
- Animation, Kids, Sports
- Family, Variety
- Animals & Nature, Biographical, Drama
- Biographical, Drama, Historical
- Comedy, Family, Western
- Animation, Kids, Medical
- Animation, Comedy, Fantasy
- Comedy, Coming of Age, Romance
- Coming of Age, Drama, Musical
- Animation, Kids, Western
- Fantasy
- Buddy, Comedy
- Drama, Historical, Sports
- Action-Adventure, Mystery, Thriller
- Comedy, Coming of Age, Crime
- Animals & Nature, Coming of Age, Drama
- Action-Adventure, Docuseries, Historical
- Animation, Fantasy
- Animation, Comedy, Dance
- Action-Adventure, Comedy, Crime
- Drama, Fantasy
- Science Fiction
- Coming of Age, Drama, Fantasy
- Action-Adventure, Animation, Musical
- Biographical, Sports
- Biographical, Family, Sports
- Animation
- Drama, Music
- Biographical, Drama, Family
- Anthology, Docuseries, Family
- Historical, Musical
- Kids, Music
- Drama, Historical
- Documentary, Sports
- Documentary, Family, Historical
- Animals & Nature, Kids, Variety
- Animation, Kids, Music
- Animation, Buddy, Coming of Age
- Action-Adventure, Science Fiction, Spy/Espionage
- Family, Lifestyle, Reality
- Anthology, Comedy, Coming of Age
- Coming of Age, Music, Musical
- Comedy, Crime, Family
- Action-Adventure, Animation, Superhero
- Animals & Nature, Comedy, Coming of Age
- Coming of Age, Sports
- Action-Adventure, Fantasy, Soap Opera / Melodrama
- Drama, Sports
- Comedy, Family, Musical
- Comedy, Drama, Romance
- Comedy, Kids
- Animals & Nature, Docuseries, Survival
- Drama, Family
- Family, Music, Variety
- Action-Adventure, Family, Historical
- Concert Film, Documentary, Music
- Animals & Nature, Biographical, Documentary
- Comedy, Fantasy, Kids
- Animation, Coming of Age, Family
- Animation, Drama, Family
- Comedy, Family, Romance
- Action-Adventure, Family
- Coming of Age, Drama, Romance
- Fantasy, Musical
- Drama
- Animals & Nature, Docuseries, Kids
- Animation, Anthology, Comedy
- Docuseries, Reality
- Animation, Comedy, Drama
- Movies
- Action-Adventure, Docuseries, Family
- Action-Adventure, Fantasy, Superhero
- Comedy, Science Fiction
- Anthology, Docuseries
- Series
- Animation, Coming of Age, Fantasy
- Biographical, Drama
- Docuseries, Reality, Survival
- Comedy, Drama, Sports
- Concert Film, Music
- Family, Fantasy, Musical
- Comedy, Drama, Family
- Action-Adventure, Animation, Anime
- Reality
- Animation, Family, Parody
- Animation, Kids, Musical
- Action-Adventure, Coming of Age, Drama
- Drama, Family, Fantasy
- Biographical, Drama, Sports
- Comedy, Family, Music
- Animation, Comedy
- Animation, Comedy, Kids
- Animation, Anthology, Family
- Comedy, Family, Kids
- Coming of Age, Drama
- Animation, Family, Musical
- Action-Adventure, Animation
- Animation, Family, Sports
- Action-Adventure, Comedy, Fantasy
- Coming of Age, Drama, Sports
- Action-Adventure, Animation, Science Fiction
- Coming of Age, Fantasy, Musical
- Docuseries
- Family, Game Show / Competition
- Comedy, Family, Sports
- Animals & Nature, Docuseries, Reality
- Comedy, Coming of Age, Science Fiction
- Biographical, Documentary, Music
- Action-Adventure, Comedy, Kids
- Action-Adventure, Animation, Anthology
- Action-Adventure, Animals & Nature, Drama
- Docuseries, Family
- Comedy, Coming of Age, Music
- Animation, Buddy, Comedy
- Coming of Age, Drama, Family
- Animals & Nature, Drama, Family
- Action-Adventure, Animals & Nature, Documentary
- Animation, Fantasy, Kids
- Animals & Nature, Comedy, Family
- Action-Adventure, Comedy, Science Fiction
- Coming of Age, Drama, Music
- Comedy, Fantasy
- Comedy, Coming of Age, Kids
- Coming of Age, Fantasy
- Action-Adventure, Fantasy, Science Fiction

Bar chart (Contagem axis, 0 to 120+):

Category	Approx value
Comedy, Family, Science Fiction	
Biographical, Documentary	
Comedy	
Action-Adventure, Animation, Buddy	
Buddy, Comedy, Coming of Age	
Animation, Comedy, Coming of Age	
Comedy, Coming of Age, Fantasy	
Action-Adventure, Coming of Age, Family	
Action-Adventure, Fantasy	
Comedy, Coming of Age	
Action-Adventure, Animation, Coming of Age	
Docuseries, Historical	
Animals & Nature, Docuseries	
Action-Adventure, Animals & Nature, Docuseries	
Action-Adventure, Animals & Nature, Family	
Action-Adventure, Science Fiction, Superhero	
Documentary, Family	
Comedy, Coming of Age, Drama	
Action-Adventure, Science Fiction	
Action-Adventure, Comedy, Coming of Age	
Action-Adventure, Family, Fantasy	
Comedy, Coming of Age, Family	
Action-Adventure, Family, Science Fiction	
Animation, Family, Kids	
Action-Adventure, Animation, Fantasy	
Animation, Kids	
Comedy, Family, Fantasy	
Comedy, Family	
Documentary, Historical	
Documentary	
Animation, Family	
Action-Adventure, Comedy, Family	
Animation, Family, Fantasy	
Animals & Nature, Documentary	
Animals & Nature, Docuseries, Family	
Animals & Nature, Documentary, Family	
Action-Adventure, Animation, Family	
Action-Adventure, Animation, Kids	
Action-Adventure, Animation, Comedy	
Animation, Comedy, Family	

In [ ]:

```python
import pandas as pd
import matplotlib.pyplot as plt
import numpy as np
import matplotlib.pyplot as plt

# Criação do gráfico de barras
content_per_year_type = df.groupby(['release_year', 'type']).size().unsta
content_per_year_type

plt.figure(figsize=(14,6))
plt.bar(content_per_year_type['Movie'].index, content_per_year_type['Movi
plt.bar(content_per_year_type['TV Show'].index, content_per_year_type['TV

# Dados no eixo x
plt.xticks(df['release_year'])

# Nome do eixo Y
plt.ylabel('Número de lançamentos')

# Nome do eixo X
plt.xlabel('Ano')

#Títlo do gráfco
plt.title('Número de lançamentos Disney por ano')
plt.xticks(rotation=90)  # Rotate x-axis labels to vertical
plt.tight_layout()
# Apresentação da figura
plt.legend()
plt.show()
```
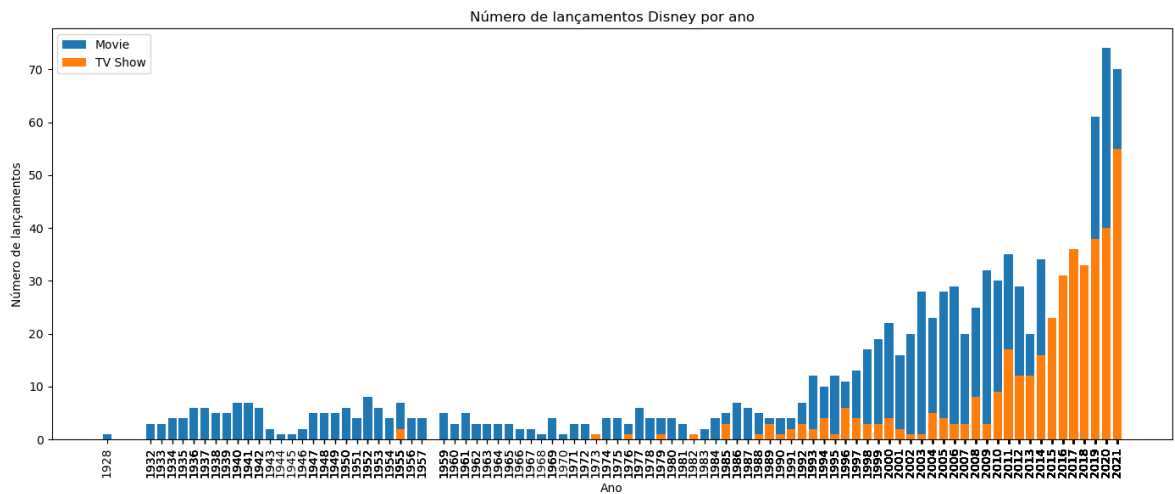
Número de lançamentos Disney por ano

```
import pandas as pd
import matplotlib.pyplot as plt
import numpy as np

df = pd.read_csv('/Users/crisyuriok/Library/CloudStorage/OneDrive-Persona
                 sep = ',',
                 decimal=',',
                 encoding='utf-8')

content_rating = df['rating'].value_counts()
labels = df['rating'].value_counts().keys()

fig1, ax1 = plt.subplots(figsize=(6,6))

c = ['#A08F9D', '#A37E9D', '#A63B95', '#BB0FA0', '#de3163', '#00ffef', '#

ax1.pie(content_rating, labels=labels ,autopct='%1.1f%%', startangle=90,

plt.title('Indicação etária')

# plt.legend(('TV-G: General Audience\n', 'TV-PG: Parental Guidance\n','G

plt.show()
```
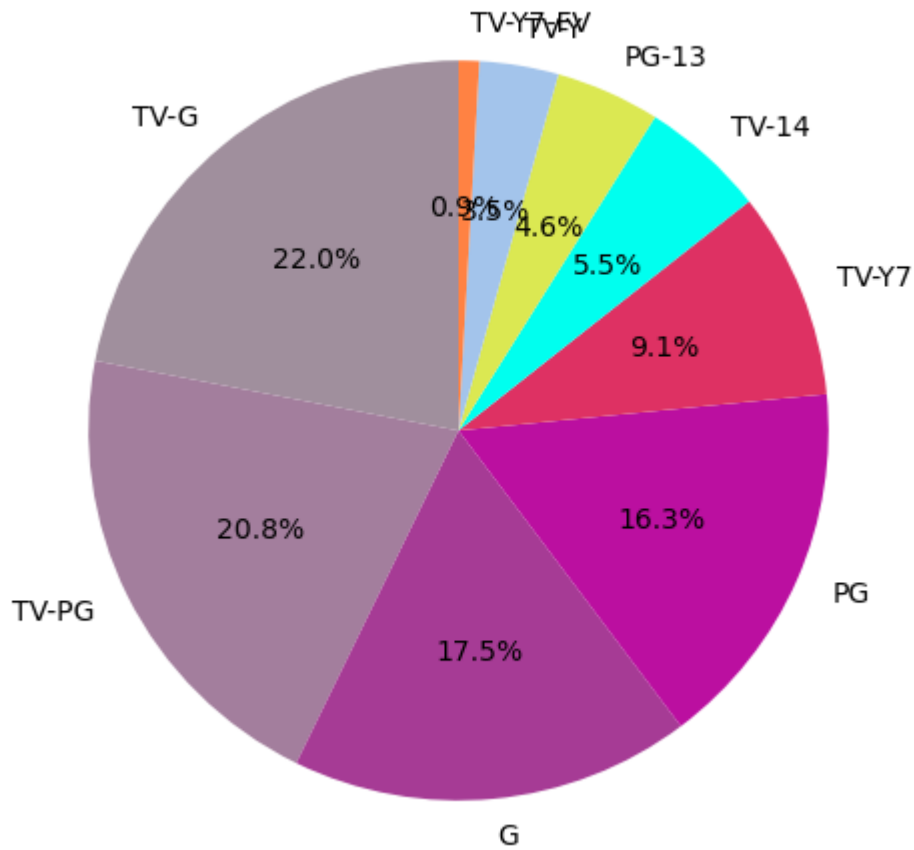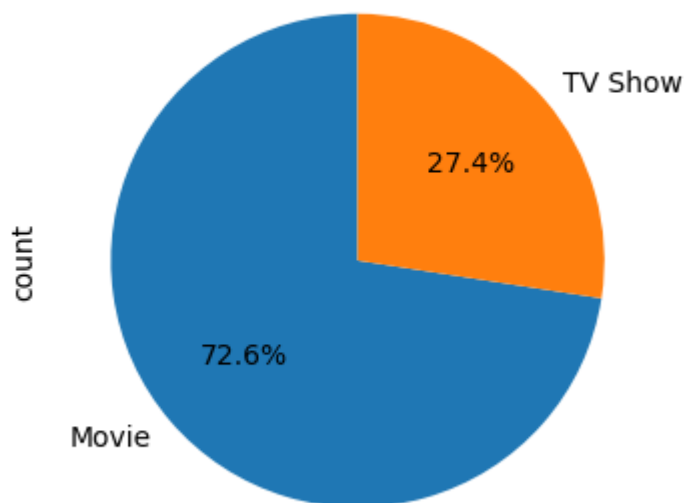
Indicação etária


```
content_type_dist = df['type'].value_counts()

plt.figure(figsize=(4,4))
content_type_dist.plot.pie(autopct='%1.1f%%', startangle=90)
plt.title('Tipos de mídia')
plt.show()
```

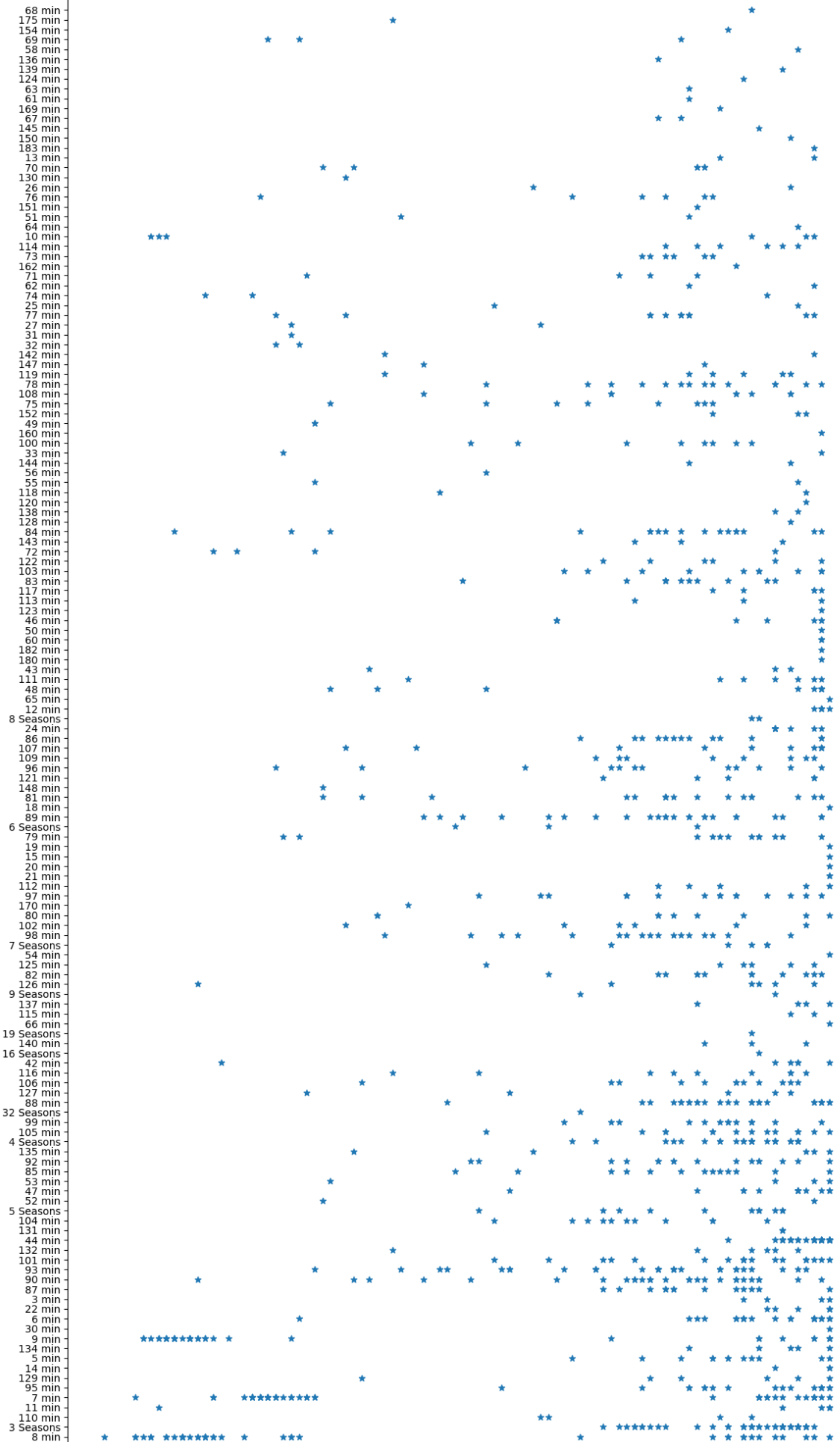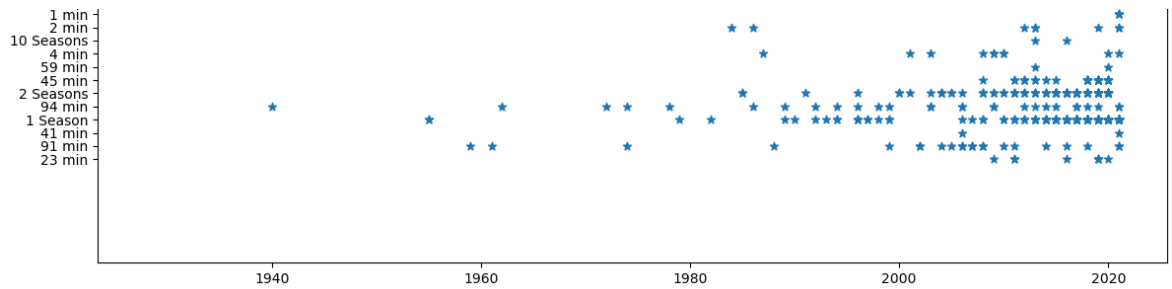## Tipos de mídia

```
In [ ]: x = df['release_year']
        y = df['duration']
        plt.figure(figsize=(14,30))

        plt.scatter(x, y , marker='*')
        plt.title('Gráfico de Dispersão entre duração e ano')
        plt.show()
```

Gráfico de Dispersão entre duração e ano

```
content_per_year_type = df.groupby(['release_year', 'type']).size().unsta
content_per_year_type

# plt.figure(figsize=(14,6))
# plt.bar(content_per_year_type['Movie'].index, content_per_year_type['Mo
# plt.bar(content_per_year_type['TV Show'].index, content_per_year_type['

plt.figure(figsize=(8,6))
plt.plot(content_per_year_type['Movie'].index, content_per_year_type['Mov
plt.plot(content_per_year_type['TV Show'].index, content_per_year_type['T
plt.title('Lançamentos por ano')
plt.xlabel('Ano')
plt.ylabel('Lançamentos')
plt.legend(content_per_year_type.keys())

plt.show()
```