



**Netflix!** What started in 1997 as a DVD rental service has since exploded into one of the largest entertainment and media companies.

Given the large number of movies and series available on the platform, it is a perfect opportunity to flex your exploratory data analysis skills and dive into the entertainment industry.

You work for a production company that specializes in nostalgic styles. You want to do some research on movies released in the 1990's. You'll delve into Netflix data and perform exploratory data analysis to better understand this awesome movie decade!

You have been supplied with the dataset [netflix\_data.csv], along with the following table detailing the column names and descriptions. Feel free to experiment further after submitting!

## The data

## netflix\_data.csv

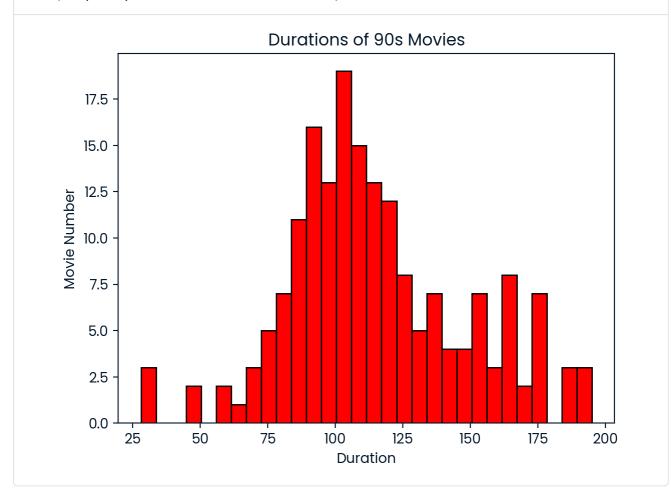
Column	Description
show_id	The ID of the show
type	Type of show
title	Title of the show
director	Director of the show
cast	Cast of the show
country	Country of origin
date_added	Date added to Netflix
release_year	Year of Netflix release
duration	Duration of the show in minutes
description	Description of the show
genre	Show genre

```
# Importing pandas and matplotlib
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
# Read in the Netflix CSV as a DataFrame
netflix_df = pd.read_csv("netflix_data.csv")
print(netflix_df)
     show_id ...
                             genre
0
         s2 ...
                            Dramas
                     Horror Movies
         s3 ...
2
                            Action
         s4 ...
3
         s5 ...
                            Dramas
4
         s6 ... International TV
       4807
      s7779 ...
                          Comedies
4808
      s7781 ...
                            Dramas
      s7782 ...
4809
                          Children
4810
      s7783 ...
                            Dramas
4811
      s7784 ...
                            Dramas
[4812 rows x 11 columns]
```

```
movies = netflix_df[netflix_df['type'] == 'Movie']
ninety_years = movies[np.logical_and(movies["release_year"] > 1989,
movies["release_year"] < 2000)]</pre>
print(ninety_years)
     show_id ...
                            genre
6
          s8 ...
                           Dramas
118
        s167 ...
                           Dramas
        s211 ...
                         Comedies
145
167
        s239
                         Comedies
              . . .
194
        s274 ...
                           Dramas
              . . .
. . .
         . . .
4672
       s7536 ...
                           Dramas
4689
       s7571 ... Classic Movies
4718
                           Action
       s7624 ...
4746
       s7682 ...
                           Action
       s7695 ...
4756
                           Dramas
[183 rows x 11 columns]
```

```
duration = ninety_years["duration"]
plt.hist(duration, bins = 30, color = "red",edgecolor='black')
plt.xlabel("Duration")
plt.ylabel("Movie Number")
plt.title("Durations of 90s Movies")
```

Text(0.5, 1.0, 'Durations of 90s Movies')



```
ninetys_action = ninety_years[ninety_years["genre"] == "Action"]

count = 0
for index, movie in ninetys_action.iterrows():
    if movie["duration"] < 90:
        count = count + 1

print("There is " + str(count) + " movies in 90s action movies that durations are less than 90 minutes. ")</pre>
```

There is 7 movies in 90s action movies that durations are less than 90 minutes.