

```
from google.colab import files
data=files.upload()

Choose Files No file chosen Upload widget is only available when the cell has been executed in the current browser session. Please rerun this cell to enable.
Saving final ratingf11.csv to final ratingf11.csv
```

```
import pandas as pd
import numpy as np

movie=pd.read_csv('main_data (1).csv')
movie.head()
```



	director_name	actor_1_name	actor_2_name	actor_3_name	genres	movie_title	comb
0	James Cameron	CCH Pounder	Joel David Moore	Wes Studi	Action Adventure Fantasy Sci-Fi	avatar	CCH Pounder Joel David Moore Wes Studi James C...
1	Gore Verbinski	Johnny Depp	Orlando Bloom	Jack Davenport	Action Adventure Fantasy	pirates of the caribbean: at world's end	Johnny Depp Orlando Bloom Jack Davenport Gore ...
2	Sam Mendes	Christoph Waltz	Rory Kinnear	Stephanie Sigman	Action Adventure Thriller	spectre	Christoph Waltz Rory Kinnear Stephanie Sigman ...
3	Christopher Nolan	Tom Hardy	Christian Bale	Joseph Gordon-Levitt	Action Thriller	the dark knight rises	Tom Hardy Christian Bale Joseph Gordon-Levitt ...

```
import numpy as np
import pandas as pd
from sklearn.feature_extraction.text import CountVectorizer
from sklearn.metrics.pairwise import cosine_similarity

cv = CountVectorizer()
count_matrix = cv.fit_transform(movie['comb'])
similarity = cosine_similarity(count_matrix)

def recommend(movie_name):
    index = movie[movie['movie_title'] == movie_name].index[0]
    lst = list(enumerate(similarity[index]))
    lst = sorted(lst, key=lambda x: x[1], reverse=True)
    lst = lst[1:11] # excluding the first item since it is the requested movie itself
    recommended_movies = []

    for i in range(len(lst)):
        a = lst[i][0]
        recommended_movies.append(movie['movie_title'][a])

    dff = movie[movie['movie_title'].isin(recommended_movies)]

    for index, row in dff.iterrows():
        print("Director:", row['director_name'])
        print("Genres:", row['genres'])
        print("Movie Title:", row['movie_title'])
        print("----")

recommend('avatar')
```

```
Director: Marc Webb
Genres: Action Adventure Fantasy Sci-Fi
Movie Title: the amazing spider-man 2
----
Director: Roland Emmerich
Genres: Action Adventure Sci-Fi
Movie Title: 2012
----
Director: James Cameron
Genres: Action Sci-Fi
Movie Title: terminator 2: judgment day
----
Director: Kinka Usher
Genres: Action Comedy Fantasy Sci-Fi
Movie Title: mystery men
----
Director: David S. Goyer
Genres: Action Adventure Fantasy Horror Sci-Fi Thriller
```

```

Movie Title: blade: trinity
----
Director: Stephen Sommers
Genres: Action Adventure Horror Sci-Fi
Movie Title: deep rising
----
Director: James Wong
Genres: Action Adventure Fantasy Sci-Fi Thriller
Movie Title: dragonball: evolution
----
Director: James Cameron
Genres: Action Adventure Sci-Fi
Movie Title: aliens
----
Director: unknown
Genres: Action Adventure Animation Drama Fantasy Sci-Fi
Movie Title: star wars: the clone wars
----
Director: James Cameron
Genres: Action Sci-Fi
Movie Title: the terminator
----

```

```
dff=movie[movie['movie_title'].isin(recommended_movies)]
```

```
dff['movie_title']
```

	director_name	actor_1_name	actor_2_name	actor_3_name	genres	movie_title	comb
33	Marc Webb	Emma Stone	Andrew Garfield	B.J. Novak	Action Adventure Fantasy Sci-Fi	the amazing spider-man 2	Emma Stone Andrew Garfield B.J. Novak Marc Webb...
52	Roland Emmerich	Oliver Platt	Liam James	Tom McCarthy	Action Adventure Sci-Fi	2012	Oliver Platt Liam James Tom McCarthy Roland Em...
260	James Cameron	Joe Morton	Jenette Goldstein	S. Epatha Merkerson	Action Sci-Fi	terminator 2: judgment day	Joe Morton Jenette Goldstein S. Epatha Merkers...
595	Kinka Usher	Janeane Garofalo	Wes Studi	Eddie Izzard	Action Comedy Fantasy Sci-Fi	mystery men	Janeane Garofalo Wes Studi Eddie Izzard Kinka ...
632	David S. Goyer	Ryan Reynolds	Natasha Lyonne	John Michael Higgins	Action Adventure Fantasy Horror Sci-Fi Thriller	blade: trinity	Ryan Reynolds Natasha Lyonne John Michael Higg...
1073	Stephen Sommers	Djimon Hounsou	Jason Flemyng	Wes Studi	Action Adventure Horror Sci-Fi	deep rising	Djimon Hounsou Jason Flemyng Wes Studi Stephen...
1626	James Wong	Ian Whyte	Texas Battle	Randall Duk Kim	Action Adventure Fantasy Sci-Fi Thriller	dragonball: evolution	Ian Whyte Texas Battle Randall Duk Kim James W...
2384	James Cameron	Michael Biehn	Carrie Henn	Jenette	Action Adventure Sci-Fi	aliens	Michael Biehn Carrie Henn Jenette Goldstein

```
import pandas as pd
```

```
# Load the movie dataset
```

```
movie = pd.read_csv('main_data (1).csv')
```

```
# Define a function to get movies by a specific director
```

```
def get_movies_by_director(director_name):
```

```
    movies = movie[movie['director_name'].str.contains(director_name, case=False)]
```

```
    return movies['movie_title'].tolist()
```

```
# Get user input for director name
```

```
director_name_input = input('Enter Director Name:').title()
```

```
# Call the function only if a director name is provided
```

```
if director_name_input:
```

```
    movies_by_director = get_movies_by_director(director_name_input)
```

```
    if movies_by_director:
```

```
        print(f"Movies directed by {director_name_input}:")
```

```
        for movie_title in movies_by_director:
```

```
            print(movie_title)
```

```
    else:
```

```
        print(f"No movies found for director {director_name_input}.")
```

```
else:
```

```
    print("Please enter a director name.")
```

