

```

pip install pandas scikit-learn numpy
import pandas as pd
from sklearn.feature_extraction.text import TfidfVectorizer
from sklearn.metrics.pairwise import cosine_similarity

movies = pd.DataFrame({
    'movie_id': [1, 2, 3, 4, 5],
    'title': ['The Matrix', 'Inception', 'Interstellar', 'The Prestige', 'The Notebook'],
    'genres': ['Sci-Fi Action', 'Sci-Fi Thriller', 'Sci-Fi Drama', 'Drama Mystery', 'Romance Drama'],
    'description': [
        'A computer hacker learns about the true nature of reality and his role in the war against its controllers.',
        'A thief steals corporate secrets through dream-sharing technology.',
        'A team of explorers travel through a wormhole in space to ensure humanity’s survival.',
        'Two stage magicians engage in a battle to create the ultimate illusion.',
        'A young couple falls in love in the 1940s.'
    ]
})

movies['content'] = movies['genres'] + " "
vectorizer = TfidfVectorizer(stop_words='english')
tfidf_matrix = vectorizer.fit_transform(movies['content'])

def recommend_movies(user_input, top_n=3):
    user_vec = vectorizer.transform([user_input])
    cosine_sim = cosine_similarity(user_vec, tfidf_matrix).flatten()
    recommended_indices = cosine_sim.argsort()[-top_n:][::-1]
    recommendations = movies.iloc[recommended_indices][['title', 'genres']]
    return recommendations

user_preference = "I love science fiction"

recommended = recommend_movies(user_preference)
print("Recommended Movies:")
print(recommended)

```
