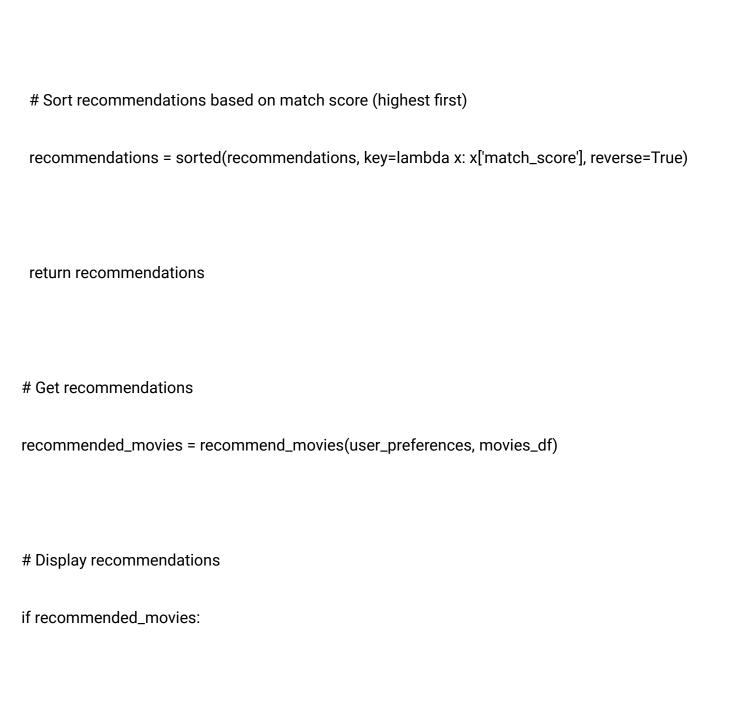
```
import pandas as pd
# Sample dataset of movies
movies_data = {
 'movie_id': [1, 2, 3, 4, 5, 6],
 'title': ['Inception', 'Titanic', 'The Matrix', 'The Dark Knight', 'Forrest Gump', 'The Godfather'],
 'genre': ['Sci-Fi', 'Romance', 'Sci-Fi', 'Action', 'Drama', 'Crime'],
 'director': ['Christopher Nolan', 'James Cameron', 'Wachowski Brothers', 'Christopher Nolan', 'Robert Zemeckis', 'Francis Ford Coppola'],
 'lead_actor': ['Leonardo DiCaprio', 'Leonardo DiCaprio', 'Keanu Reeves', 'Christian Bale', 'Tom Hanks', 'Marlon Brando']
```

```
# Convert to DataFrame for easy handling
movies_df = pd.DataFrame(movies_data)
# Sample user preferences (e.g., likes Sci-Fi and Leonardo DiCaprio)
user_preferences = {
 'genre': 'Sci-Fi',
 'actor': 'Leonardo DiCaprio'
# Content-based recommendation function
def recommend_movies(user_preferences, movies_df):
```

```
recommendations = []
# Filter movies based on user's preferences
for _, movie in movies_df.iterrows():
  match_score = 0
  # Check genre match
  if movie['genre'] == user_preferences['genre']:
    match_score += 1
  # Check lead actor match
```

```
if user_preferences['actor'] in movie['lead_actor']:
  match_score += 1
# If movie matches preferences, add to recommendations
if match_score > 0:
  recommendations.append({
    'title': movie['title'],
    'genre': movie['genre'],
    'lead_actor': movie['lead_actor'],
    'match_score': match_score
  })
```



print("Recommended Movies for You:")
for movie in recommended_movies:
print(f"Title: {movie['title']}, Genre: {movie['genre']}, Lead Actor: {movie['lead_actor']}, Match Score: {movie['match_score']}")
else:
print("No recommendations based on your preferences.")