Import pandas as pd

From sklearn.feature\_extraction.text import TfidfVectorizer

From sklearn.metrics.pairwise import cosine\_similarity

# Sample Movies Dataset

Movies = [

“The Avengers: Superheroes save the world”,

“Titanic: A tragic love story on a sinking ship”,

“Inception: Dream within a dream”,

“Interstellar: Journey through space and time”,

“The Notebook: A romantic drama”,

“The Dark Knight: Batman vs Joker”,

“Gravity: Astronauts stranded in space”,

“La La Land: Musical romance in Los Angeles”

]

# TF-IDF Vectorization

Vectorizer = TfidfVectorizer()

Movie\_vectors = vectorizer.fit\_transform(movies)

# User Input

User\_input = “I love movies about space and astronauts”

User\_vec = vectorizer.transform([user\_input])

# Calculate Cosine Similarity

Similarities = cosine\_similarity(user\_vec, movie\_vectors)

# Find the Best Match

Best\_match\_index = similarities.argmax()

Recommended\_movie = movies[best\_match\_index]

# Output

Print(f”User Input: {user\_input}”)

Print(f”Recommended Movie: {recommended\_movie}”)