

Case-Study: Spotify Song Recommendation

Case Study Number & Title	Spotify Song Recommendation
Introduction	Spotify makes new song recommendations to users every week based on the songs that are currently saved in their playlists.
Learning Outcomes	<p>Take the real-world problem:</p> <ul style="list-style-type: none"> • Break it down into logical components • Create the logical components using Python code and implement a legitimate solution
Background Information	New users are joining all the time and you need to make a decision on which songs you are going to recommend to them. Your new users might have listened to only 3 songs, and you will need to recommend them based on that.
Scenario	You work at Spotify as a data scientist and have been tasked to create a simple Python program that gives recommendations to new users on what songs they might like.
Problem Statement/ Business objectives	How would you break the following problem/scenario down into logical components and use python code to recommend preferred songs?
Data, Information for case analysis	The data is dynamically generated and there is no fixed data.
Questions	Create a python program that gives song recommendations to new users
Deliverables and Rubric	<p>A. ipynb file with Python code solution to solve this problem. The. ipynb file should have modular Python code that represents the logical components and joins to create a coherent solution.</p> <p>The criteria for grading are given:</p> <ul style="list-style-type: none"> • The logic you apply to break down the problem: 40 points • A fully solved output with the final song recommendations: 50 points • Neatness/Readability of code: 5 points • Usage of variables: 2.5 points

	<ul style="list-style-type: none">• Inclusion of comments: 2.5 points
Key Takeaways/Results	The ability to dissolve/divide/break down the problem into separate logical components and join them together neatly to create a coherent solution using python.