

Sorting algorithm

Use Boolean operators to write code that can select a particular song from a playlist.



Years 7-8
Years 9-10



Groups of 2



20 minutes



Pens/paper

AND

The song must contain both factors.

OR

The song contains at least one of these factors.

NOT

The song contains none of these factors.

Code your playlist using the following categories:

Song Title

Duration

Artist

Album

Genre

TITLE	ARTIST	ALBUM		
♥ Lights Up	Harry Styles	Lights Up	2 days ago	2:52
♥ Graveyard	Halsey	Graveyard	2 days ago	3:02
♥ 10,000 Hours (with Justin Bieber)	Dan + Shay, Justin Bieber	10,000 Hours (with Justin Bieber)	2 days ago	2:48
♥ Someone You Loved	Lewis Capaldi	Divinely Uninspired To A Hellish Extent	2 days ago	3:02
♥ How Do You Sleep?	Sam Smith	How Do You Sleep?	2 days ago	3:22
♥ Liar	Camila Cabello	Liar	2 days ago	3:27
♥ Good Thing (with Kehlani)	<small>EXPLICIT</small> Zedd, Kehlani	Good Thing (with Kehlani)	2 days ago	3:31
♥ Beautiful People (feat. Khalid)	Ed Sheeran, Khalid	Beautiful People (feat. Khalid)	2 days ago	3:18
♥ Trampoline (with ZAYN)	SHAED, ZAYN	Trampoline (with ZAYN)	2 days ago	3:04
♥ Writing on the Wall (feat. Post Malone & Cardi B)	<small>EXPLICIT</small> French Montana, Rvssian, Post Malone, Ca...	Writing on the Wall (feat. Post Malone & C...	2 days ago	3:21
♥ Lonely (with Jonas Brothers)	Diplo, Jonas Brothers	Lonely	2 days ago	2:20
♥ Ride It	Regard	Ride It	2 days ago	2:38
♥ Good As Hell	<small>EXPLICIT</small> Lizzo	Good As Hell	2 days ago	2:39
♥ Cry for Me	Camila Cabello	Cry for Me	2 days ago	3:09

Swap your algorithm with another group and see if they can find your song.

Sorting algorithm: extension

Smart playlists

A smart playlist is created by an algorithm. This algorithm analyses audio and textual elements of a song and collects information about different users' recommendations.

This data can then be used to compare songs to each other and identify patterns in characteristics, suggesting similar songs to the one the user is listening to.

Can you make an algorithm that could suggest songs to classmates based on their recommendations?