



DATA CLEANING

PROJECT



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Project Introduction

Audible, a leading platform for audiobooks and spoken-word content, aims to enhance its user experience and optimize its offerings through data-driven decision-making. This project focuses on cleaning and standardizing Audible's dataset using Excel Power Query Editor to ensure data consistency and accuracy. The goal is to prepare the dataset for insightful analysis, helping Audible make informed decisions related to pricing, content availability, and customer satisfaction.



Key Tasks

1. Standardize the name column to ensure consistent title casing.
2. Separate combined first and last names in the author column if they are currently combined.
3. Ensure all entries in the releasedate column follow a consistent date format (DD-MM-YYYY).
4. Convert the time column from text format to a duration format that Excel recognizes.
5. Ensure the price column is in a numeric format, and identify any non-numeric values.
6. Convert text ratings in the stars column to numeric values.
7. Split the narratedby column into multiple columns if multiple narrators are listed.
8. Merge the releasedate and language columns into a single new column named releaseinfo with the format "DD-MM-YYYY, Language."
9. Ensure all currency values in the price column are formatted consistently with two decimal places.



UNCLEANED VS. CLEANED DATA

Power Query Editor was used to clean and standardize the raw data for analysis.

name	author	narrator	time	releasedate	language	stars	price
Geronimo Stilton #11 & #12	Writtenby:GeronimoStilton	Narratedby:BillLobley	2 hrs and 20 mins	04-08-2008	English	5 out of 5 stars34 ratings	468
The Burning Maze	Writtenby:RickRiordan	Narratedby:RobbieDaymond	13 hrs and 8 mins	01-05-2018	English	4.5 out of 5 stars41 ratings	820
The Deep End	Writtenby:JeffKinney	Narratedby:DanRussell	2 hrs and 3 mins	06-11-2020	English	4.5 out of 5 stars38 ratings	410
Daughter of the Deep	Writtenby:RickRiordan	Narratedby:SoneelaNankani	11 hrs and 16 mins	05-10-2021	English	4.5 out of 5 stars12 ratings	615
The Lightning Thief: Percy Jackson, Book 1	Writtenby:RickRiordan	Narratedby:JesseBernstein	10 hrs	13-01-2010	English	4.5 out of 5 stars181 ratings	820
The Hunger Games: Special Edition	Writtenby:SuzanneCollins	Narratedby:TatianaMaslany	10 hrs and 35 mins	30-10-2018	English	5 out of 5 stars72 ratings	656
Quest For the Diamond Sword	Writtenby:WinterMorgan	Narratedby:LukeDaniels	2 hrs and 23 mins	25-11-2014	English	5 out of 5 stars11 ratings	233
The Dark Prophecy	Writtenby:RickRiordan	Narratedby:RobbieDaymond	12 hrs and 32 mins	02-05-2017	English	5 out of 5 stars50 ratings	820
Merlin Mission Collection	Writtenby:MaryPopeOsborne	Narratedby:MaryPopeOsborne	10 hrs and 56 mins	02-05-2017	English	5 out of 5 stars5 ratings	1,256.00
The Tyrantâ€™s Tomb	Writtenby:RickRiordan	Narratedby:RobbieDaymond	13 hrs and 22 mins	24-09-2019	English	5 out of 5 stars58 ratings	820
The Titan's Curse: Percy Jackson, Book 3	Writtenby:RickRiordan	Narratedby:JesseBernstein	8 hrs and 48 mins	14-01-2010	English	4.5 out of 5 stars130 ratings	820
Magic Tree House Collection: Books 9-16	Writtenby:MaryPopeOsborne	Narratedby:MaryPopeOsborne	5 hrs and 23 mins	24-08-2011	English	5 out of 5 stars6 ratings	1,206.00
Magic Tree House Collection: Books 1-8	Writtenby:MaryPopeOsborne	Narratedby:MaryPopeOsborne	6 hrs and 1 min	27-09-2011	English	5 out of 5 stars7 ratings	1,206.00
Magnus Chase and the Ship of the Dead	Writtenby:RickRiordan	Narratedby:MichaelCrouch	12 hrs and 58 mins	03-10-2017	English	5 out of 5 stars41 ratings	820
Northern Lights	Writtenby:PhilipPullman	Narratedby:PhilipPullman,fullcast,RuthWilson	11 hrs and 55 mins	24-06-2021	English	4 out of 5 stars2 ratings	1,093.00
Geronimo Stilton #13 and #14	Writtenby:GeronimoStilton	Narratedby:BillLobley	2 hrs and 25 mins	08-02-2008	English	4.5 out of 5 stars33 ratings	467
Magic Tree House Collection	Writtenby:MaryPopeOsborne	Narratedby:MaryPopeOsborne	5 hrs and 4 mins	26-12-2004	English	5 out of 5 stars7 ratings	1,206.00
Exile	Writtenby:ShannonMessenger	Narratedby:CaitlinKelly	14 hrs and 41 mins	06-11-2018	English	5 out of 5 stars20 ratings	836
Merlin Mission Collection	Writtenby:MaryPopeOsborne	Narratedby:MaryPopeOsborne	10 hrs and 18 mins	02-05-2017	English	5 out of 5 stars11 ratings	1,256.00
Neverseen	Writtenby:ShannonMessenger	Narratedby:CaitlinKelly	16 hrs and 42 mins	06-11-2018	English	5 out of 5 stars13 ratings	1,003.00
The Tower of Nero	Writtenby:RickRiordan	Narratedby:RobbieDaymond	12 hrs and 12 mins	06-10-2020	English	5 out of 5 stars79 ratings	615
Eldest: The Inheritance Cycle, Book 2	Writtenby:ChristopherPaolini	Narratedby:GerrardDoyle	23 hrs and 29 mins	14-04-2009	English	4.5 out of 5 stars47 ratings	957
Artemis Fowl	Writtenby:EoinColfer	Narratedby:GerryO'Brien	6 hrs and 46 mins	11-04-2013	English	5 out of 5 stars27 ratings	683
Geronimo Stilton 22 & 24	Writtenby:GeronimoStilton	Narratedby:BillLobley	2 hrs and 37 mins	01-02-2011	English	4.5 out of 5 stars25 ratings	469
Percy Jackson and the Battle of the Labyrinth	Writtenby:RickRiordan	Narratedby:JesseBernstein	10 hrs and 32 mins	21-01-2010	English	5 out of 5 stars101 ratings	820
Winnie-the-Pooh	Writtenby:A.A.Milne	Narratedby:PeterDennis	2 hrs and 46 mins	28-12-2003	English	5 out of 5 stars15 ratings	468
Magic Tree House Collection: Books 25-32	Writtenby:MaryPopeOsborne	Narratedby:MaryPopeOsborne	7 hrs and 9 mins	01-09-2020	English	5 out of 5 stars3 ratings	1,256.00
Geronimo Stilton #20 and #21	Writtenby:GeronimoStilton	Narratedby:BillLobley	2 hrs and 32 mins	01-10-2010	English	5 out of 5 stars18 ratings	469



name	Author 1	Author 2	Author 3	Narrator 1	Narrator 2	Narrator 3	releaseinfo	time in mins	stars	no. of people rated	price
Geronimo Stilton #11 & #12	Geronimo Stilton			Bill Lobley			04-08-2008, English	140	5.34		468
The Burning Maze	Rick Riordan			Robbie Daymond			01-05-2018, English	788	4.5.41		820
The Deep End	Jeff Kinney			Dan Russell			06-11-2020, English	123	4.5.38		410
Daughter Of The Deep	Rick Riordan			Soneela Nankani			05-10-2021, English	676	4.5.12		615
The Lightning Thief: Percy Jackson, Book 1	Rick Riordan			Jesse Bernstein			13-01-2010, English	600	4.5.181		820
The Hunger Games: Special Edition	Suzanne Collins			Tatiana Maslany			30-10-2018, English	635	5.72		656
Quest For the Diamond Sword	Winter Morgan			Luke Daniels			25-11-2014, English	143	5.11		233
The Dark Prophecy	Rick Riordan			Robbie Daymond			02-05-2017, English	752	5.50		820
Merlin Mission Collection	Mary Pope Osborne			Mary Pope Osborne			02-05-2017, English	656	5.5		1256
The Tyrant'S Tomb	Rick Riordan			Robbie Daymond			24-09-2019, English	802	5.58		820
The Titan's Curse: Percy Jackson, Book 3	Rick Riordan			Jesse Bernstein			14-01-2010, English	528	4.5.130		820
Magic Tree House Collection: Books 9-16	Mary Pope Osborne			Mary Pope Osborne			24-08-2011, English	323	5.6		1206
Magic Tree House Collection: Books 1-8	Mary Pope Osborne			Mary Pope Osborne			27-09-2011, English	361	5.7		1206
Magnus Chase And The Ship Of The Dead	Rick Riordan			Michael Crouch			03-10-2017, English	778	5.41		820
Northern Lights	Philip Pullman			Philip Pullman	fullcast	Ruth Wilson	24-06-2021, English	715	4.2		1093
Geronimo Stilton #13 And #14	Geronimo Stilton			Bill Lobley			08-02-2008, English	145	4.5.33		467
Magic Tree House Collection	Mary Pope Osborne			Mary Pope Osborne			26-12-2004, English	304	5.7		1206
Exile	Shannon Messenger			Caitlin Kelly			06-11-2018, English	881	5.20		836
Merlin Mission Collection	Mary Pope Osborne			Mary Pope Osborne			02-05-2017, English	618	5.11		1256
Neverseen	Shannon Messenger			Caitlin Kelly			06-11-2018, English	1002	5.13		1003
The Tower Of Nero	Rick Riordan			Robbie Daymond			06-10-2020, English	732	5.79		615
Eldest: The Inheritance Cycle, Book 2	Christopher Paolini			Gerrard Doyle			14-04-2009, English	1409	4.5.47		957
Artemis Fowl	Eoin Colfer			Gerry O'Brien			11-04-2013, English	406	5.27		683
Geronimo Stilton 22 & 24	Geronimo Stilton			Bill Lobley			01-02-2011, English	157	4.5.25		469
Percy Jackson And The Battle Of The Labyrinth	Rick Riordan			Jesse Bernstein			21-01-2010, English	632	5.101		820
Winnie-The-Pooh	A.A.Milne			Peter Dennis			28-12-2003, English	166	5.15		468
Magic Tree House Collection: Books 25-32	Mary Pope Osborne			Mary Pope Osborne			01-09-2020, English	429	5.3		1256
Geronimo Stilton #20 And #21	Geronimo Stilton			Bill Lobley			01-10-2010, English	152	5.18		469



DATA TRANSFORMATION STEPS

Sequential actions performed in Power Query Editor for data preparation.

APPLIED STEPS	
Source	⚙
Promoted Headers	⚙
Changed Type	
Capitalized Each Word	
Extracted Text After Delimi...	⚙
Split Column by Delimiter	⚙
Split Column by Character ...	
Removed Columns	
Merged Columns	⚙
Split Column by Character ...	
Merged Columns1	⚙
Split Column by Character ...	
Merged Columns2	⚙
Renamed Columns	

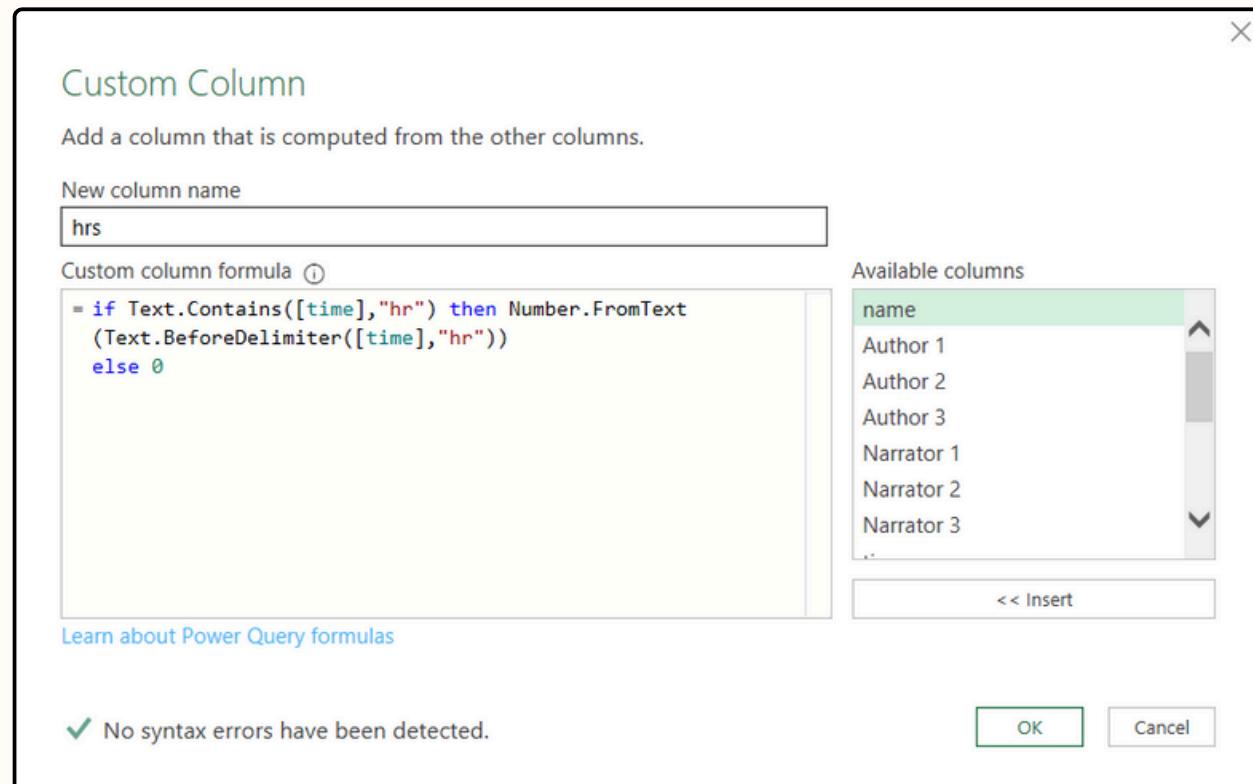
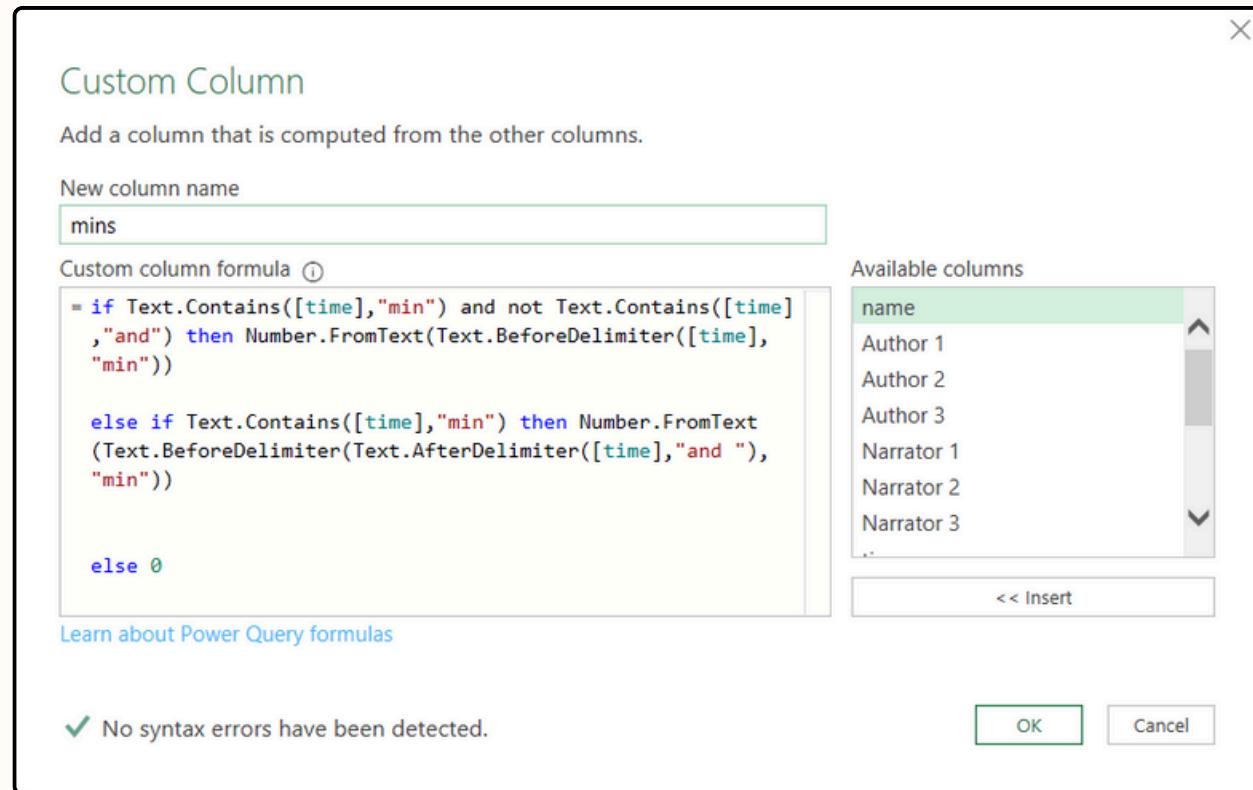
APPLIED STEPS	
Extracted Text After Delimi...	⚙
Split Column by Delimiter1	⚙
Changed Type1	
Removed Columns1	
Split Column by Character ...	
Merged Columns3	⚙
Split Column by Character ...	
Merged Columns4	⚙
Split Column by Character ...	
Merged Columns5	⚙
Capitalized Each Word1	
Merged Columns6	⚙
Replaced Value	⚙
Replaced Errors	⚙

APPLIED STEPS	
Changed Type2	
Split Column by Delimiter2	⚙
Changed Type3	
Split Column by Character ...	
Extracted Text Before Deli...	⚙
Reordered Columns	
Renamed Columns1	
Added Custom	⚙
Added Custom1	⚙
Inserted Multiplication	⚙
Inserted Addition	⚙
Renamed Columns2	
Removed Columns2	
Reordered Columns1	
✗ Replaced Errors1	⚙



TRANSFORMATION USING CUSTOM COLUMN

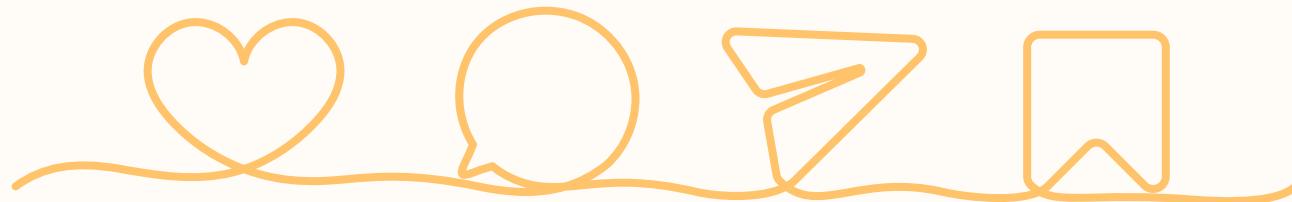
First, extracted minutes from the time column, then extracted hours, converted them into minutes, and summed both values.





Thank you

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Amanjot Singh

