audible

an **amazon** company

DATA CLEANING
PROJECT

WWW.AUDIBLE.IN

CONTENT

ABOUT AUDIBLE

Audible is an American online <u>audiobook</u> and <u>podcast</u> service that allows users to purchase and stream audiobooks and other forms of spoken word content. This content can be purchased individually or under a subscription model where the user receives "credits" that can be redeemed for content monthly and receive access to a curated on-demand library of content.

Audible is the United States' largest audiobook producer and retailer.The service is owned by Audible, a wholly-owned subsidiary of <u>Amazon.com, Inc.</u>, headquartered in <u>Newark, New Jersey</u>.

PROBLEM STATEMENT

Utilize Power Query Editor in Excel to clean and standardize an Audible dataset. Tasks include formatting columns, ensuring data consistency, and preparing the dataset for analysis.

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.

Raw Dataset

| File | Home | Insert | Draw | Page Layout | Formulas | Data | Review | View | Developer | Help |

L35

	A	B	C	D	E	F	G	H	I
1	name	author	narrator	time	releasedate	language	stars	price	
2	Geronimo	Writtenby:GeronimoStilton	Narratedby:BillLobely	2 hrs and 20 mins	04-08-2008	English	5 out of 5 stars34 ratings	468	
3	The Burni	Writtenby:RickRiordan	Narratedby:RobbieDaymond	13 hrs and 8 mins	01-05-2018	English	4.5 out of 5 stars41 ratings	820	
4	The Deep	Writtenby:JeffKinney	Narratedby:DanRussell	2 hrs and 3 mins	06-11-2020	English	4.5 out of 5 stars38 ratings	410	
5	Daughter	Writtenby:RickRiordan	Narratedby:SoneelaNankani	11 hrs and 16 mins	05-10-2021	English	4.5 out of 5 stars12 ratings	615	
6	The Lightn	Writtenby:RickRiordan	Narratedby:JesseBernstein	10 hrs	13-01-2010	English	4.5 out of 5 stars181 ratings	820	
7	The Hunge	Writtenby:SuzanneCollins	Narratedby:TatianaMaslany	10 hrs and 35 mins	30-10-2018	English	5 out of 5 stars72 ratings	656	
8	Quest for	Writtenby:WinterMorgan	Narratedby:LukeDaniels	2 hrs and 23 mins	25-11-2014	English	5 out of 5 stars11 ratings	233	
9	The Dark F	Writtenby:RickRiordan	Narratedby:RobbieDaymond	12 hrs and 32 mins	02-05-2017	English	5 out of 5 stars50 ratings	820	
10	Merlin Mi	Writtenby:MaryPopeOsborne	Narratedby:MaryPopeOsborne	10 hrs and 56 mins	02-05-2017	English	5 out of 5 stars5 ratings	1,256.00	
11	The Tyran	Writtenby:RickRiordan	Narratedby:RobbieDaymond	13 hrs and 22 mins	24-09-2019	English	5 out of 5 stars58 ratings	820	
12	The Titan'	Writtenby:RickRiordan	Narratedby:JesseBernstein	8 hrs and 48 mins	14-01-2010	English	4.5 out of 5 stars130 ratings	820	
13	Magic Tre	Writtenby:MaryPopeOsborne	Narratedby:MaryPopeOsborne	5 hrs and 23 mins	24-08-2011	English	5 out of 5 stars6 ratings	1,206.00	
14	Magic Tre	Writtenby:MaryPopeOsborne	Narratedby:MaryPopeOsborne	6 hrs and 1 min	27-09-2011	English	5 out of 5 stars7 ratings	1,206.00	
15	Magnus C	Writtenby:RickRiordan	Narratedby:MichaelCrouch	12 hrs and 58 mins	03-10-2017	English	5 out of 5 stars41 ratings	820	
16	Northern	Writtenby:PhilipPullman	Narratedby:PhilipPullman,fullcast,RuthWilson	11 hrs and 55 mins	24-06-2021	English	4 out of 5 stars2 ratings	1,093.00	
17	Geronimo	Writtenby:GeronimoStilton	Narratedby:BillLobley	2 hrs and 25 mins	08-02-2008	English	4.5 out of 5 stars33 ratings	467	
18	Magic Tre	Writtenby:MaryPopeOsborne	Narratedby:MaryPopeOsborne	5 hrs and 4 mins	26-12-2004	English	5 out of 5 stars7 ratings	1,206.00	
19	Exile	Writtenby:ShannonMessenger	Narratedby:CaitlinKelly	14 hrs and 41 mins	06-11-2018	English	5 out of 5 stars20 ratings	836	
20	Merlin Mi	Writtenby:MaryPopeOsborne	Narratedby:MaryPopeOsborne	10 hrs and 18 mins	02-05-2017	English	5 out of 5 stars11 ratings	1,256.00	
21	Neverseer	Writtenby:ShannonMessenger	Narratedby:CaitlinKelly	16 hrs and 42 mins	06-11-2018	English	5 out of 5 stars13 ratings	1,003.00	
22	The Towe	Writtenby:RickRiordan	Narratedby:RobbieDaymond	12 hrs and 12 mins	06-10-2020	English	5 out of 5 stars79 ratings	615	
23	Eldest: Th	Writtenby:ChristopherPaolini	Narratedby:GerrardDoyle	23 hrs and 29 mins	14-04-2009	English	4.5 out of 5 stars47 ratings	957	
24	Artemis F	Writtenby:EoinColfer	Narratedby:GerryO'Brien	6 hrs and 46 mins	11-04-2013	English	5 out of 5 stars27 ratings	683	
25	Geronimo	Writtenby:GeronimoStilton	Narratedby:BillLobley	2 hrs and 37 mins	01-02-2011	English	4.5 out of 5 stars25 ratings	469	

audible_uncleaned

"Power Query"

Power Query is an ETL tool created by Microsoft for data extraction, loading and transformation, and is used to retrieve data from sources, process it, and load them into one or more target systems.

Steps to load data in "Power Query"

There can be various sources to load Data into Power query , but we have chosen source to be an Excel Workbook. so,

- **Click Data > Get Data > From File > Excel Workbook**
- Navigate to your Excel workbook in the Import Data window and click Import.
- The Power Query Navigator window opens. CSV and Text files contain a single source. An Excel workbook is different; it can have multiple worksheets, all of which are treated as separate data objects.

POWER QUERY (INITIAL SCREEN)

File	Home	Transform	Add Column	View	

Close & Load | **Refresh Preview** | Properties | Advanced Editor | Manage | **Choose Columns** | **Remove Columns** | **Keep Rows** | **Remove Rows** | **Split Column** | **Group By** | Data Type: Text | Use First Row as Headers | Replace Values | Merge Queries | Append Queries | Combine Files | **Manage Parameters** | **Data source settings** | New Source | Recent Sources | Enter Data

Close | Query | Manage Columns | Reduce Rows | Sort | Transform | Combine | Parameters | Data Sources | New Query

`= Table.TransformColumnTypes(#"Promoted Headers",{{"name", type text}, {"author", type text}, {"narrator", type text}, {"time", type text}, {"releasedate", type`

	name	author	narrator	time	releasedate	langua
	● Valid 100%	● Valid 100%	● Valid 100%	● Valid 100%	● Valid 100%	● Valid
	● Error 0%	● Error 0%	● Error 0%	● Error 0%	● Error 0%	● Error
	● Empty 0%	● Empty 0%	● Empty 0%	● Empty 0%	● Empty 0%	● Empty
1	Geronimo Stilton #11 & #12	Writtenby:GeronimoStilton	Narratedby:BillLobely	2 hrs and 20 mins	04-08-2008	English
2	The Burning Maze	Writtenby:RickRiordan	Narratedby:RobbieDaymond	13 hrs and 8 mins	01-05-2018	English
3	The Deep End	Writtenby:JeffKinney	Narratedby:DanRussell	2 hrs and 3 mins	06-11-2020	English
4	Daughter of the Deep	Writtenby:RickRiordan	Narratedby:SoneelaNankani	11 hrs and 16 mins	05-10-2021	English
5	The Lightning Thief: Percy Jackson, Book 1	Writtenby:RickRiordan	Narratedby:JesseBernstein	10 hrs	13-01-2010	English
6	The Hunger Games: Special Edition	Writtenby:SuzanneCollins	Narratedby:TatianaMaslany	10 hrs and 35 mins	30-10-2018	English
7	Quest for the Diamond Sword	Writtenby:WinterMorgan	Narratedby:LukeDaniels	2 hrs and 23 mins	25-11-2014	English
8	The Dark Prophecy	Writtenby:RickRiordan	Narratedby:RobbieDaymond	12 hrs and 32 mins	02-05-2017	English
9	Merlin Mission Collection	Writtenby:MaryPopeOsborne	Narratedby:MaryPopeOsborne	10 hrs and 56 mins	02-05-2017	English
10	The Tyrantâ€™s Tomb	Writtenby:RickRiordan	Narratedby:RobbieDaymond	13 hrs and 22 mins	24-09-2019	English
11	The Titan's Curse: Percy Jackson, Book 3	Writtenby:RickRiordan	Narratedby:JesseBernstein	8 hrs and 48 mins	14-01-2010	English
12	Magic Tree House Collection: Books 9-16	Writtenby:MaryPopeOsborne	Narratedby:MaryPopeOsborne	5 hrs and 23 mins	24-08-2011	English
13	Magic Tree House Collection: Books 1-8	Writtenby:MaryPopeOsborne	Narratedby:MaryPopeOsborne	6 hrs and 1 min	27-09-2011	English
14	Magnus Chase and the Ship of the Dead	Writtenby:RickRiordan	Narratedby:MichaelCrouch	12 hrs and 58 mins	03-10-2017	English
15	Northern Lights	Writtenby:PhilipPullman	Narratedby:PhilipPullman,fullcast,RuthWilson	11 hrs and 55 mins	24-06-2021	English
16	Geronimo Stilton #13 and #14	Writtenby:GeronimoStilton	Narratedby:BillLobley	2 hrs and 25 mins	08-02-2008	English
17	Magic Tree House Collection	Writtenby:MaryPopeOsborne	Narratedby:MaryPopeOsborne	5 hrs and 4 mins	26-12-2004	English
18	Exile	Writtenby:ShannonMessenger	Narratedby:CaitlinKelly	14 hrs and 41 mins	06-11-2018	English
19	Merlin Mission Collection	Writtenby:MaryPopeOsborne	Narratedby:MaryPopeOsborne	10 hrs and 18 mins	02-05-2017	English
20	Neverseen	Writtenby:ShannonMessenger	Narratedby:CaitlinKelly	16 hrs and 42 mins	06-11-2018	English
21	The Tower of Nero	Writtenby:RickRiordan	Narratedby:RobbieDaymond	12 hrs and 12 mins	06-10-2020	English
22	Eldest: The Inheritance Cycle, Book 2	Writtenby:ChristopherPaolini	Narratedby:GerrardDoyle	23 hrs and 29 mins	14-04-2009	English

Query Settings

PROPERTIES

Name

audible_uncleaned

All Properties

APPLIED STEPS

Source ⚙
Navigation ⚙
Promoted Headers ⚙
× Changed Type

Data transformation steps..

Sequential actions performed in Power Query Editor for data preparation

APPLIED STEPS

- Source ⚙
- Navigation ⚙
- Promoted Headers ⚙
- Changed "price" column fo...
- Replaced "Free" with 0 ⚙
- Changed "price" column fo...
- Changed Type
- Capitalized Each Word in "...
- Trimmed Text in "author" c...
- Extracted Text After Delimi... ⚙
- Split Column by Delimiter ⚙
- Changed Type1
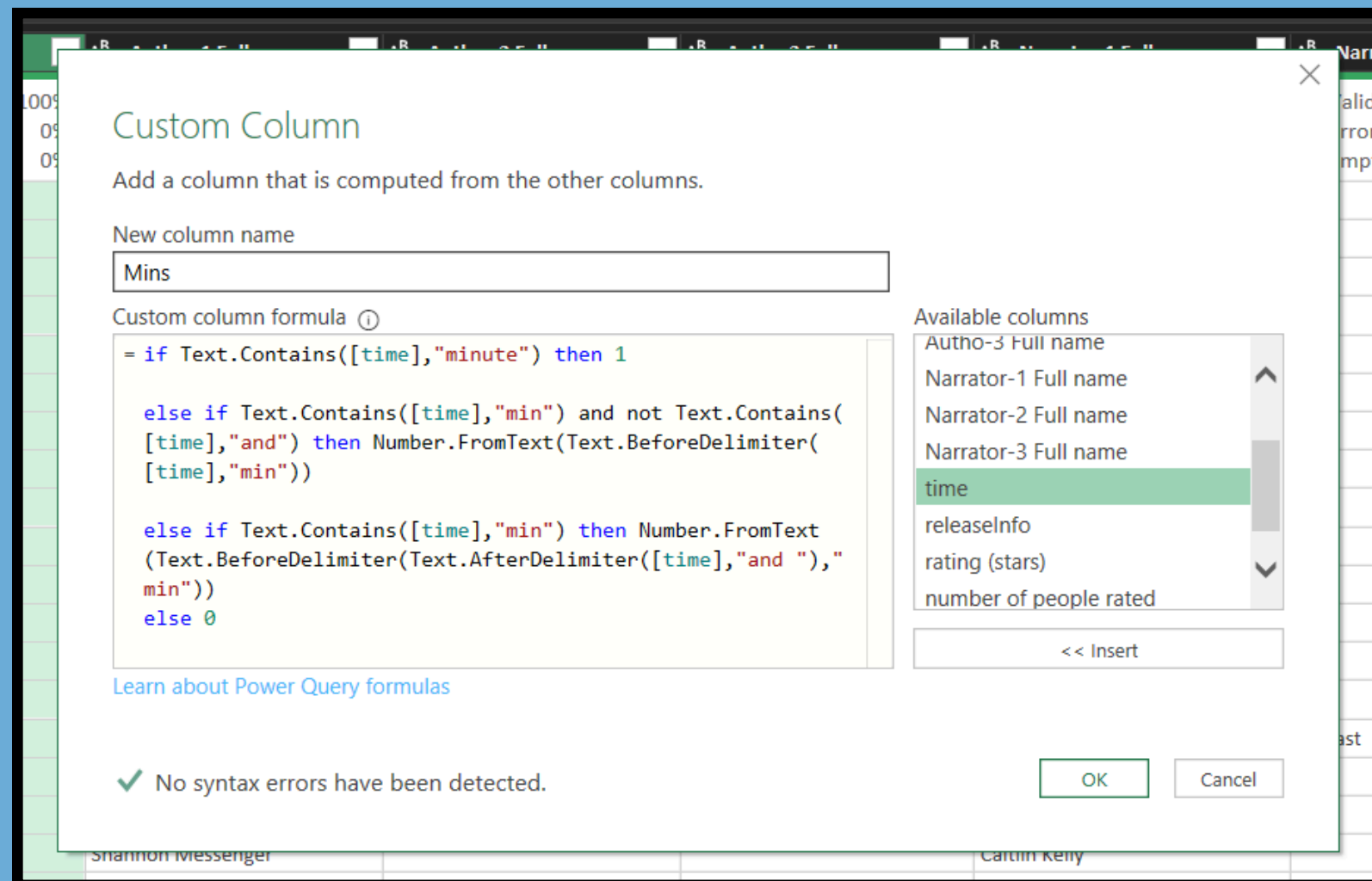- Removed null value Colum...
- Split Column by Character ...
- Merged Columns ⚙

APPLIED STEPS

- Split Column by Character ...
- Merged Columns1 ⚙
- Split Column by Character ...
- Merged Columns2 ⚙
- Trimmed Text in all "author...
- Changed "price" column in...
- Capitalized Each Word in "l...
- Merged "release date" and... ⚙
- Split Column by Delimiter1 ⚙
- Changed Type2
- Replaced Value ⚙
- Changed Type3
- Split Column by Character ...
- Removed Columns
- Renamed Columns

APPLIED STEPS

- Split Column by Delimiter2 ⚙
- Changed Type4
- Removed star column
- Renamed rating column
- Trimmed "narrator" column
- Split Column by Delimiter3 ⚙
- Changed Type5
- Removed Columns1
- Split Column by Delimiter4 ⚙
- Split Column by Character ...
- Merged Columns3 ⚙
- Split Column by Character ...
- Merged Columns4 ⚙
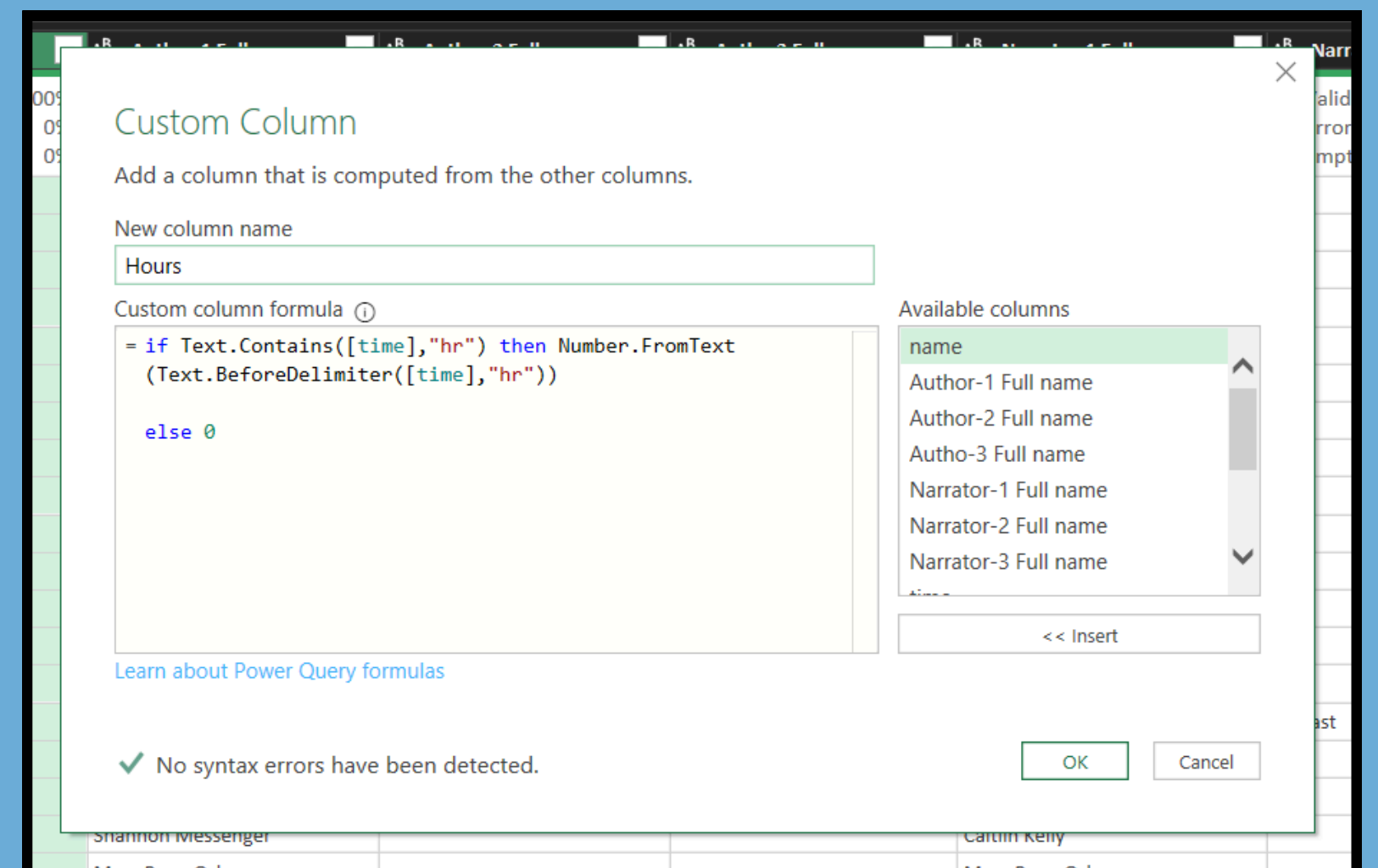- Split Column by Character ...
- Merged Columns5 ⚙

- Removed Columns2
- Renamed Columns1
- Added Custom ⚙
- Added Custom1 ⚙
- Changed Type6
- Inserted Multiplication ⚙
- Inserted Addition ⚙
- Removed Columns3
- Reordered Columns
- Renamed Columns2
- Removed Columns4

Transformation using custom column

- First, extracted "min" from the "time" column, then extracted "hr" , converted them into minutes format, and summed both values.

For "min"

For "hr"

Cleaned Dataset

name	Author-1 Full name	Author-2 Full nam	Autho-3 Full nam	Narrator-1 Full name	Narrator-2 Full n	Narrator-3 Ful	Time (standa	releaseInfo	rating (s	number	price
Geronimo Stilton #11 & #12	Geronimo Stilton			Bill Lobely			140	04-08-2008, English	5	34	468
The Burning Maze	Rick Riordan			Robbie Daymond			788	01-05-2018, English	4.5	41	820
The Deep End	Jeff Kinney			Dan Russell			123	06-11-2020, English	4.5	38	410
Daughter Of The Deep	Rick Riordan			Soneela Nankani			676	05-10-2021, English	4.5	12	615
The Lightning Thief: Percy Jackson, Book 1	Rick Riordan			Jesse Bernstein			600	13-01-2010, English	4.5	181	820
The Hunger Games: Special Edition	Suzanne Collins			Tatiana Maslany			635	30-10-2018, English	5	72	656
Quest For The Diamond Sword	Winter Morgan			Luke Daniels			143	25-11-2014, English	5	11	233
The Dark Prophecy	Rick Riordan			Robbie Daymond			752	02-05-2017, English	5	50	820
Merlin Mission Collection	Mary Pope Osborne			Mary Pope Osborne			656	02-05-2017, English	5	5	1256
The Tyrant's Tomb	Rick Riordan			Robbie Daymond			802	24-09-2019, English	5	58	820
The Titan'S Curse: Percy Jackson, Book 3	Rick Riordan			Jesse Bernstein			528	14-01-2010, English	4.5	130	820
Magic Tree House Collection: Books 9-16	Mary Pope Osborne			Mary Pope Osborne			323	24-08-2011, English	5	6	1206
Magic Tree House Collection: Books 1-8	Mary Pope Osborne			Mary Pope Osborne			361	27-09-2011, English	5	7	1206
Magnus Chase And The Ship Of The Dead	Rick Riordan			Michael Crouch			778	03-10-2017, English	5	41	820
Northern Lights	Philip Pullman			Philip Pullman	Fullcast	Ruth Wilson	715	24-06-2021, English	4	2	1093
Geronimo Stilton #13 And #14	Geronimo Stilton			Bill Lobley			145	08-02-2008, English	4.5	33	467
Magic Tree House Collection	Mary Pope Osborne			Mary Pope Osborne			304	26-12-2004, English	5	7	1206
Exile	Shannon Messenger			Caitlin Kelly			881	06-11-2018, English	5	20	836
Merlin Mission Collection	Mary Pope Osborne			Mary Pope Osborne			618	02-05-2017, English	5	11	1256
Neverseen	Shannon Messenger			Caitlin Kelly			1002	06-11-2018, English	5	13	1003
The Tower Of Nero	Rick Riordan			Robbie Daymond			732	06-10-2020, English	5	79	615
Eldest: The Inheritance Cycle, Book 2	Christopher Paolini			Gerrard Doyle			1409	14-04-2009, English	4.5	47	957
Artemis Fowl	Eoin Colfer			Gerry O'Brien			406	11-04-2013, English	5	27	683
Geronimo Stilton 22 & 24	Geronimo Stilton			Bill Lobley			157	01-02-2011, English	4.5	25	469
Percy Jackson And The Battle Of The Labyrinth	Rick Riordan			Jesse Bernstein			632	21-01-2010, English	5	101	820
Winnie-The-Pooh	A.A.Milne			Peter Dennis			166	28-12-2003, English	5	15	468
Magic Tree House Collection: Books 25-32	Mary Pope Osborne			Mary Pope Osborne			429	01-09-2020, English	5	3	1256
Geronimo Stilton #20 And #21	Geronimo Stilton			Bill Lobley			152	01-10-2010, English	5	18	469
The Red Pyramid	Rick Riordan			Jane Collingwood	Joseph May		824	24-01-2013, English	4.5	37	820
Mystery Of The Griefer'S Mark	Winter Morgan			Luke Daniels			113	25-11-2014, English	5	9	233
Geronimo Stilton #17	Geronimo Stilton			Bill Lobley			148	13-07-2009, English	5	8	468
The House At Pooh Corner	A.A.Milne			Peter Dennis			192	05-04-2005, English	5	5	374
Mission Unstoppable	Dan Gutman			Michael Goldstrom			368	01-08-2013, English	5	8	702
Darkness Of Dragons	Tui T.Sutherland			Shannon Mc Manus			626	01-08-2017, English	5	8	656
14 Short Stories Bundle For Kids: Adventure, Scier	Nayomi Phillips			Monica Rachelle	Jim D.Johnston	Katie Otten	193	22-01-2019, English			501
The Adventures Of Rusty	Ruskin Bond			Neha Gargava			341	01-11-2018, Hindi	4.5	10	284
Geronimo Stilton #15 And #16	Geronimo Stilton			Bill Lobley			163	08-02-2008, English	4	28	467
The Lost Heir	Tui T.Sutherland			Shannon Mc Manus			443	04-02-2016, English	5	9	575

audible_cleaned | Sheet1