

Power Query Tool

Value added Course Lecture 5 (Practical)

Er. Brijendra Singh

Assistant Professor, Department of Bioinformatics UIET, CSJMU University, Kanpur

Power Query Tool

- Power Query is a business intelligence tool available in Excel that allows you to import data from many different sources and then clean, transform and reshape your data as needed.
- **Power Query** is available as an add-in to <u>download and install</u> for Excel 2010 and 2013 and will appear as a new tab in the ribbon labelled **Power Query**. In 2016 it was renamed to **Get & Transform** and appears in the **Data** tab without the need to install any add-in.
- Importing your data with **Power Query** is simple. Excel provides many common data connections that are accessible from the **Data** tab and can be found from the **Get Data** command.

Conti..

- Get data from a **single file** such as an Excel workbook, Text or CSV file, XML and JSON files. You can also import multiple files from within a given folder.
- Get data from various databases such as SQL Server, Microsoft Access, Analysis Services, SQL Server Analysis Server, Oracle, IBM DB2, MySQL, PostgreSQL, Sybase, Teradata and SAP HANA databases.
- Get data from Microsoft Azure
- Get data from online services like SharePoint, Microsoft Exchange, Dynamics 365, Facebook and Salesforce.
- Get data from other sources like a table or range inside the current workbook, from the web, a Microsoft Query, Hadoop, OData feed, ODBC and OLEDB.
- We can merge two queries together similar to joining two queries in SQL.
- We can append a query to another query similar to a union of two queries in SQL.
- Note: The available data connection options will depend on your version of Excel.

	5 · · · T	2		DAT	A TRANSPOSE .	bar - Excel			Table Tools				Sauch	Dhawale IC	- 10	
													- Strakkinki	atesti de la	The second second	
File	e Home I	isert Page Layou	ut Formulas	Data Review V	New Develop	er LEARN	MORE PRO He	Hp LEARN NEW	Design 🖓	Tell me what you	want to do					81
1	00 -00	Calibri	+ 11 +	∧ ∧ ==	P. 1	Wrap Text	Genera	ni +		Normal	Bad				AutoSum - AT	2
Past		B / U	· · · · ·	A	सम ह	Menge & Ca		5. 1 2 2	Conditional Form	at as Good	Neutral		nsert Delete	Format		& Find I
7	Format Pail Cloboard	ner unn	Font	- <u>-</u>	Alighment			Number 5	Formatting * Tab	le - Styles		(C)	Cells		Clear - Filter Editing	- Select
	Capobard			181	Pagement			reaction -		Sthee			CHI		coming	
2		1.1	× v fr	Sr No												
4	A	8	C	D	E	F	G	н	1	J	K	L	M	N	0	
	Column1 💌	the set of the set of the set of the	and the second se	Column4					US	ING E	XCEI	EOR	MIL			
	Sr No		Date	Cust.Name	-			-		a final part of the						1
	Stauts	and print the local data with the local data w	Туре	City		Sr No	and an	Date	Cust.Name	Stauts	nin telefono a surged e telefonio e	Туре	City	Zone	State	Cour
4	Zone	and the state of t	Country	Refund				and the state of the local diversity of the state of the	Ajay Sharma	Completed	400052	CONTRACTOR -	Dadar	Central	served and the state is the state of strategies, so	-
5	1	بالاسواب والعوالة والمراجز والمراجز والمراجع		Ajay Sharma	38	3	and the second sec	Internet and the second s	Kapil Sharma	Completed	and the second sec	Wholesaler	CONTRACTOR OF MARCH	West	Maharastra	e a contresso
	Completed	400052		Dadar	25 DB		and the second se	26-05-2021	and desires and one are setting to a setting	Failed	400012	the state of the s	Andheri	the second second	Maharastra	and the second second
7	Central	Maharastra		No				the state of the s	Vinod Gupta	Failed	400032	and a little of the second	Vashi	East	Maharastra	-
8	2		Contra installed with the local designation	Kapil Sharma			and the second se	25-05-2021	CONTRACTOR AND A CONTRACTOR	Completed	400055	ALL PROPERTY AND ADDRESS OF	Dadar	Central	Maharastra	or number of the
	Completed	and the second se	Wholesaler	Col the plant on a			and the second se	and show a statistic state of a lating the second	Ajay Sharma	Completed	the second s	Wholesaler		Central	Maharastra	-
0	West	Maharastra	A CONTRACTOR OF A CONTRACTOR A CONTRA	Yes			7 10007	26-05-2021	Kiran Shinde	Completed	400057	Retail	Dadar	Central	Maharastra	India
1	3	Contract Internet	26-05-2021	A special shall be of the second secolar reaction of the			1			1						
	Failed	400012	100000	Andheri					USING	GEXC	EL P	OWE	ROI	IER'	Y	
3	West	Maharastra		Yes			_	_	CONT	U LAC		OTTE		J LIV		
4	4			Vinod Gupta		Sr No	Order II	And the second second second second	Cust.Name	Contraction of the local division of the loc	Pincode -		Contraction of the local division of the loc	of the local division of the local divisione		Cou
	Failed	400032		Vashi					the second s	Completed	400052			Central	Maharastra	
	East	Maharastra		No					and the second se	interaction of the state of the second state o		Wholesaler		West	Maharastra	
7	5		25-05-2021	drain south and					Suraj Gupta	Failed	400012		Andheri		Maharastra	
	Completed	400055		Dadar					Vinod Gupta	Failed	400032		Vashi	East	Maharastra	
	Central	Maharastra	demonstration and an endowing the share	No				25-05-2021	CONTRACTOR AND A DESCRIPTION OF A DESCRI	Completed	400055			Central	Maharastra	
0	6		And a state of the state of the state of the	Ajay Sharma					Ajay Sharma	Completed		Wholesaler		Central	Maharastra	
	Completed	and the second se	Wholesaler				7 10007	26-05-2021	Kiran Shinde	Completed	400057	Retail	Dadar	Central	Maharastra	India
2	Central	Maharastra	India	No												

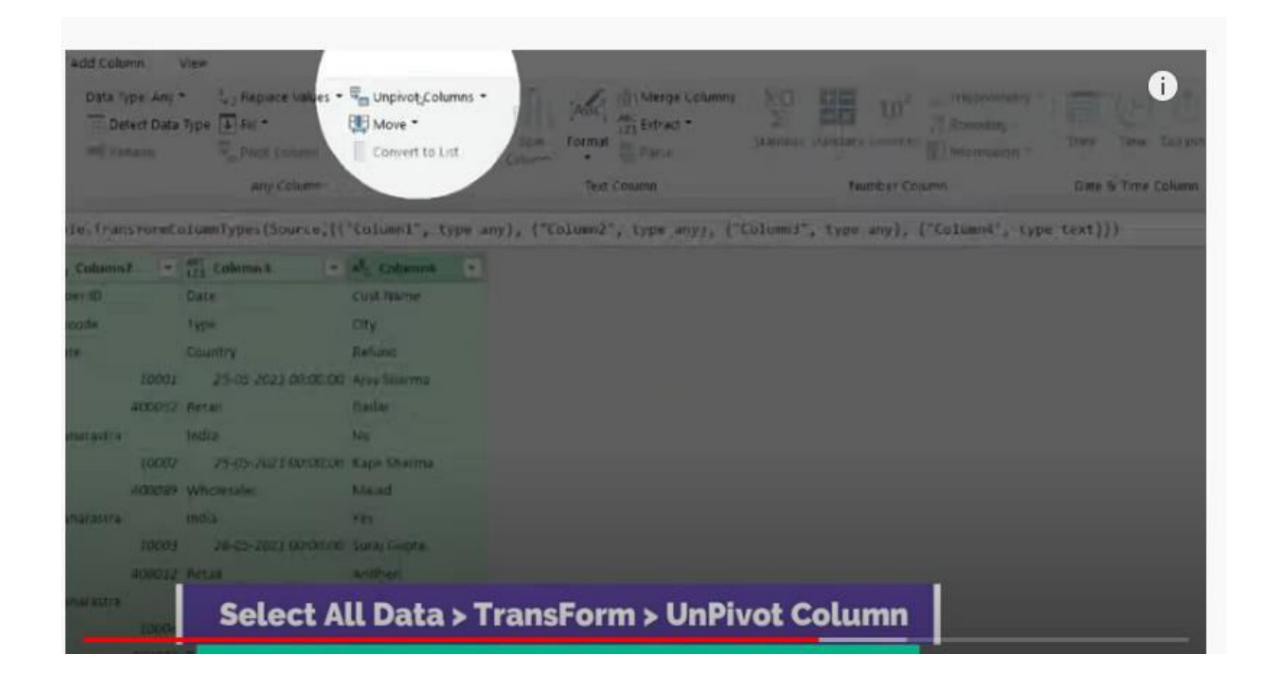
Power Query

	-				-	-	-						
A tor		-				118.8	10. P	and the second se	Ball Based	10		al tat ind	18
Coperand I.		-						-			14	1004	
A		¢	0	8	F.	G	H	1	1	- K	6	- M	
Sr No	Order ID	Date	CustName										
Stauth	Pincode	Type	City										
Zome .		Country	Refund										
1	10001	25-05-2021	Ajay Sharma										
Completes	400052	Rated	Dødar										
Carranal	Mahanastra	and the second state of th	No										
	10002	25-09/2023	Kepil Sharmon										
Completies	400089	Wholesaler	Mailed										
Wiresdi	Mahanastra		Wess-										
	20063	316-015-2023	Suraj Gupta										
Failed	400012	Retail	Andheri										
West	Mahanastra	a contract of the second se	West										
4	20064	3'6-0/5-2023	Vinod Gupta										
Failed	400012	Retail	VauNi										
Kavt:	Mahanastra	lindia	No										
5		25405.2021	Raj Kaler										
Complete	400055	Retail	Deder										
Central	Mahanastra	lindia .	No										

From From Fr	vel Data	New Prog	Table Rutrun All - Correct		L Sort Filter	To Security To Advanced Rec	Sext to fram. At Columns 10 Du	enove Data plicates Validation Data Tests	Consolidate Sec	What Analy	if forecast Gr sis - Sheet	Colley	otal
A	В	C	D	E	F	G	н	1	J	к	L	м	1
Sr No	Order ID	Date	Cust.Name									01000	
Stauts	Pincode	Туре	City										
Zone	State	Country	Refund										
1	10001	25-05-2021	Ajay Sharma										
Completed	400052	Retail	Dadar										
Central	Maharastra	India	No										
2	10002	25-05-2021	Kapil Sharma										
Completed	400089	Wholesaler	Malad										
West	Maharastra	India	Yes										
3	10003	26-05-2021	Suraj Gupta										
Failed	400012	Retail	Andheri										
West	Maharastra	India	Yes										
4	10004	26-05-2021	Vinod Gupta										
Failed	400032	Retail	Vashi										
East	Maharastra	India	No										
	A Sr No Stauts Zone 1 Completed Central 2 Completed West 3 Failed West 4 Failed	WebTestSources -ConnectionBar External DataIIIABSr NoOrder IDStautsPincodeZoneState110001Completec400052CentralMaharastra210002Completec400089WestMaharastra310003Failed400012WestMaharastra410004Failed400032	From Trom Trom Trom Ent SourcesEasting ConnectionsFrom Trom ConnectionsABCABCSr NoOrder IDDateStautsPincodeTypeZoneStateCountry11000125-05-2021Completec400052RetailCompletec400089WholesalerWestMaharastraIndia31000326-05-2021Failed400012RetailWestMaharastraIndia41000426-05-2021Failed400032Retail	Nom From Text Det Text Det Det Connection Det 	Nome Frage Frage Table Frage Table Frage Table Table <thtable< th=""> <thtable< th=""> Ta</thtable<></thtable<>	Image Image <th< td=""><td>Nome From From</td><td>Image: From From Order 120 Lasting of the from Order 120</td><td>Image: Note of them from Other is withing them from Other is within the from them is within the from the isotetic isotetic is within the from the isotetic is</td><td>A B C D E F G H J Sr No Order ID Date Coust.Name E F G H J Sr No Order ID Date Coust.Name E F G H J Statts Pincode Type City Coust.Name E F G H J Zone State Country Refund E F G H J J Zone State Country Refund E F G H J J Completed 400052 Retail Dadar E<!--</td--><td>A B C D E F G H J K Sr No Order ID Date Cust.Name E F G H J K Status Pincode Type City Consultate Consultate</td><td>Image Image <th< td=""><td>Image: Description Image: De</td></th<></td></td></th<>	Nome From From	Image: From From Order 120 Lasting of the from Order 120	Image: Note of them from Other is withing them from Other is within the from them is within the from the isotetic isotetic is within the from the isotetic is	A B C D E F G H J Sr No Order ID Date Coust.Name E F G H J Sr No Order ID Date Coust.Name E F G H J Statts Pincode Type City Coust.Name E F G H J Zone State Country Refund E F G H J J Zone State Country Refund E F G H J J Completed 400052 Retail Dadar E </td <td>A B C D E F G H J K Sr No Order ID Date Cust.Name E F G H J K Status Pincode Type City Consultate Consultate</td> <td>Image Image <th< td=""><td>Image: Description Image: De</td></th<></td>	A B C D E F G H J K Sr No Order ID Date Cust.Name E F G H J K Status Pincode Type City Consultate Consultate	Image Image <th< td=""><td>Image: Description Image: De</td></th<>	Image: Description Image: De

												and there is	- 80	a	
Hie	Hone ins	rt Reprilayout I	Comutas Duras B	even View Develop	er LEMINT	IN ONE PRO Help	LEARNINEW	V Tell me what you	want to do						
đ	Ge Day		Get & Tourd			54 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	A version		Date Tests	- Constant of the	100	Nead	Color	10.40	
4			J Ji 28-05-						4		L.				
1	A Sr No	B Order ID	C	D Cust.Name	E	F	G	н	1	J	К	L	М	N	
2	Stauts	Pincode	Type	City											
3	Zone	State	Country	Refund											
4	1	and the second se	Complexity of the Statistical Architecture and the Statistica	Ajay Sharma											
5	Completed	and the second se	and the second se	Dadar											
6	Central	Maharastra		No											
7	2	10002	25-05-2021	Kapil Sharma											
8	Completed	400089	Wholesaler	Malad											
9	West	Maharastra	India	Yes				Create Table		7 × 1					
0	3	10003	26-05-2021	Suraj Gupta				Spere is the data to		101					
1	Failed	400012	Retail	Andheri				AN VALUE		1					
12	West	Maharastra	India	Yes				L My Martin	ban headers						
13	4	10004	26-05-2021	Vinod Gupta					OK.	Carcel					
14	Failed	400032	Retail	Vashi											
15	East	Maharastra	India	No											
6	5	10005	25-05-2021	Raj Kale											
17	Completed	400055	Retail	Dadar											
18	Central	Maharastra	India	No											

 riew + III Mariage Corry	•	Choose Re olymes * Cal Manage Cal	more Keep Remove umms* Rows* Rows*	Caluma* By		tions films Parameters *	Data source settings Data Sources	Anne Garry			
				and the second se	ny], ("Column2", Type any], ["C	diamoj', type any), ("G	olumni", typ	e text}}}	~	Query Settings	
57 Pilo	Other i		City Conternets	A [®] E Columnia Cust.Name						· PROPERTIES	
Sait	Preside		tipe Q	01						Neme	
Ine	State	-	Country	Baland						Tuble1	
1000	1	1000	25-05-2021-00-00-0							All Properties	
Completed	1		fatal	Dativ							
Central	Mahari		India	160						 APPLIED STEPS 	
	1000		25-05-3022 00:00:0							Source	
Completed	1-		wholesale:	Malad						K Changest Type	
west	Mahari		India	Tes							
			24-05-2021-00-00-0								
fuled			Batal.	Anifheri							
Watt	Mahar		India	140							
		1000	26-05-2022 00:00:0	02 Vired Gupta							
falled			Butal	Varity							
East	Méhan	etta	Itelia	No							
	5	1000	25-05-2021-00:00:0	10 Raj Kale							
Completed		40000	Retail	Gadar							
Carthial	Mahar	eitta -	tuba.	80							
		1000	11-05-3021-00-0010	X [°] Ajay Sharma							
Completed		40000	Wholesaler .	Dellar							
Gertral	Matter	ette .	India	80							
	×	5000	34-05-3022-00:00:0	10 Kiran Shinde							
Completed		40005	Retail	Datlar							
Carttal	Mahari	ntis.	India .	160							



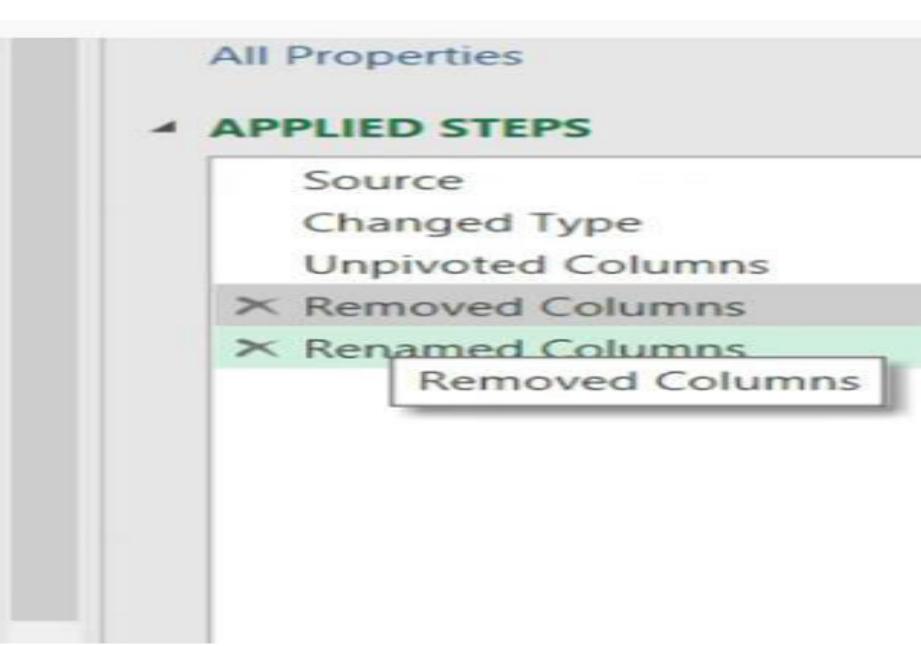


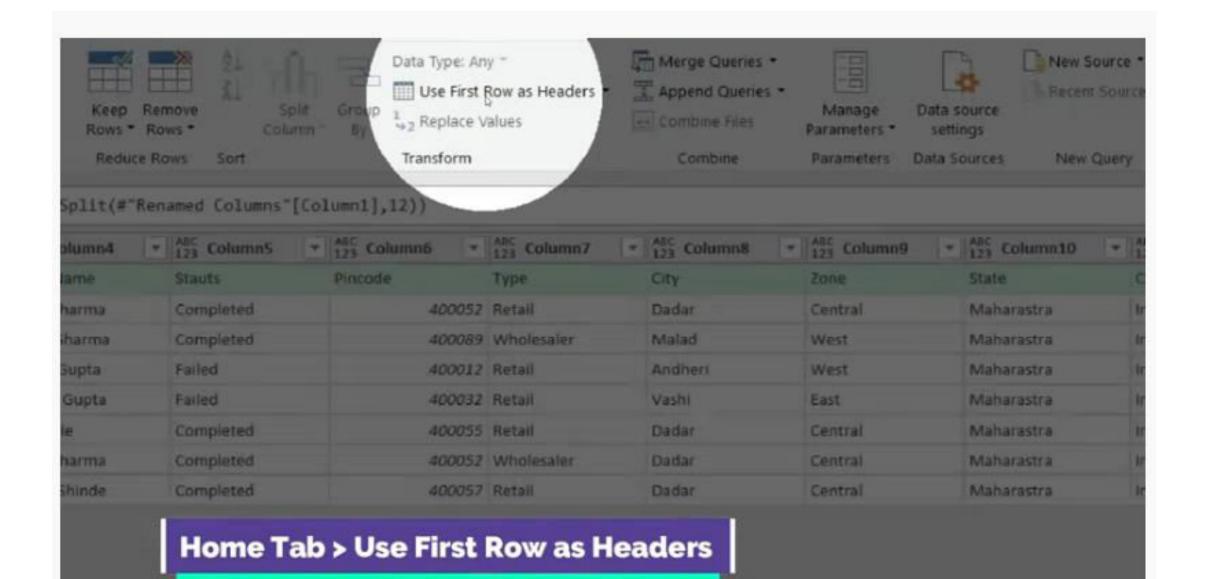
Table	Any Column
✓ f _x =	List.Split(#"Renamed Columns"[Column1],6)
Column1 -	
No	
der ID	
te	
st.Name	
uts	
code	
be	
Y	
ne	

Image: frem: Image: frem:	
xba x	Curron Curron Curron Course Course
14 fait 15 fait 16 Gat	

8	List
9	List
10	List
	List
	List
13	List
14	List
15	List
16	List
List	
Sr No	63.
Order	r ID
Date	
Cust.	Name
Staut	s
Pinco	

<pre>= Table.FromRows(List.\$plit(#"Renamed Columns"[Column1],12))</pre>

1 1 1000 00000 0000	PROPERTIES Name Table All Properties
2 A 10001 25-05-2021 00:00:00 App (Series Completed 400052 Rese Dade Centre Managers india	Name Tatoel
4 30001 36-05-2022 00:00:00 Soriel Graphs Failed 400022 Retail Retail Andre With Made and Mathematics Made 4 30001 36-05-2022 00:00:00 Soriel Graphs Failed 400022 Retail Variation Mathematics Mat	All Properties
A JORDE Jorde Jorde Jorde Jorde Marketing Marketing Marketing 5 4 JORDE Jorde Jorde Katt Marketing Marke	
6 3 10001 25-05-2022 (0-00:00) Naj Kule Completed 4000052 Natural Dade Central Maharatra India 2 4 10009 27-05-2022 (0-00:00) Ajay Sharma Campleted 4000052 Wholesaler Dade Central Maharatra India 8 3 10007 36-05-2022 (0:00:00) Kiran Shinde Campleted 400057 Natal Dade Central Maharatra India	
2 A 30000 27-05-2022 00:00:00 Ajay Shama Completed 400057 Wholesaler Dadar Central Maharatha India 3 30007 36-05-3022 00:00:00 Kran Shinde Campleted 400057 Astal Dadar Central Maharatha India	· APPLIED STEPS
8 JODD JS-05-JUJ 2 00:00:00 Knan Shinde Campleted a00057 Astal Dadar Central Maharatha India	Source
	Changed Type
	Renamed Columns X Custom/1



Load	100.5	lew	🔢 Manage 🝷	Choose Remove Columns • Columns • Manage Columns		Remove Rows T ce Rows Sort	Split G Column •
47	Close &			.TransformColumn			
S		-	1 ² 3 Order ID	Date	- A ^B	C Cust.Name	▼ A ^B _C Sta
Queries	1	1	1000	1 25-05-2021 00	:00:00 A	jay Sharma	Comple
Ø	2	2	1000	2 25-05-2021 00	:00:00 K	apil Sharma	Comple
	3	3	1000	3 26-05-2021 00	:00:00 St	uraj Gupta	Failed
	4	4	1000	4 26-05-2021 00	:00:00 V	inod Gupta	Failed
	5	5	1000	5 25-05-2021 00	:00:00 R	aj Kale	Comple
		6	1000	6 27-05-2021 00	:00:00 A	ay Sharma	Comple
	6	0	2000				

turne.	
ıd	
Sharma	
r	
Sharma	
d	
Gupta	

Select how you want to view this data in your workbook.

- 🔠 🖲 Table
- Only Create Connection

Select where the data should be loaded.

- New worksheet
- O Existing worksheet:



Add this data to the Data Model



		T 5 (500	VE WITH HOW	INGUERY also				Table Trets						Satish Dhawale 🎦 🖽	- 0
	-	Intert #	lage L	ayout fo	mules	Data	Rester	Ves 1	eveloper Ll	ARN MORE PRO	Help	LEARN NO	V Design	Query	Q Tel ment	et you want	to do			
Name: 1,2 esize Tab roperties		Summa Remove Convert	Dupl		2 1 10	et D	port Refe			 Header Row Total Row Banded Rows 	First Co Last Co Bandeo Table 19/4	lumn I Columns	Filter Button		A DESCRIPTION OF		104-51/			
			11	X., 1	1.5	518	¥0													
A	-	a See 10	Due	c			D	L	Fincode	G	н	1		ĸ	L Refund	м	N	•	Workbook Queries	3
A	1		_		-		_	Completed		2 Retail	Dadar .	Sector Sector Sector	Maharastra		No			11		
	2					and the second		Completed		9 Wholesaler		West	Maharastra		Yes				Table1	
	3			05-2021				Failed		2 Retail	Andheri	West	Maharastra	India	Yes				7 rows loaded.	
	4			05-2021				Failed	40003	2 Retail	Vashi	East	Maharastra	India	No			11	T I I I I I I I I I I I I I I I I I I I	
	5	10005	25	05-2021	00:00	Raj Kal	le.	Completed	40005	S Retail	Dadar	Central	Maharastra	India	No			н		
	6	10006	27.	05-2021	00:00	Ajay St	harma	Completed	40005	2 Wholesaler	Dadar	Central	Maharastra	India	No			н		
	7	10007	26-	05-2021	00:00	Kiran S	hinde	Completed	40005	7 Retail	Dadar	Central	Maharastra	India	No					
																3E				
																		11		
																		11		
																		11		
																		11		
																		11		
																		11		

THANK YOU