Before we start with cleaning the data, let's make copy of the source file as "Online retail data-V1".

Make a copy of the raw data tabs and saving source data for reference and renaming tabs. This is for cross reference or in case you accidentally delate something, you can reference the original file to check if the information is correct and nothing was added new. This can be a drawback if you are dealing with a huge data set, the question you should be asking then is there some other tool that can help with the data cleaning and transformation instead of excel



Step 2: Let's explore the data in the tab Year 2009-2010 to have a rough idea of the data. Conver it to a table to skim

there the information quickly.

Number of rows in the tab Year 2009-2010 = 538171

Step 3: (Referring pic 1) Skimming through some of the rows to understand what I will need to clean. Some of the stock codes look irrelevant.



Step 4: Some irrelevant information like Postage, Dotcom postage, manual etc that will not be needed for data analysis. I wont delete this information yet. There is also lots of information missing too.

A 1	nvoice -	StockCode	▼ Description	▼ Quantity	▼ Invo	iceDate -	Price 🔻 Cus	tomer ID - Country
14	493260	DOT	DOTCOM POSTAGE		1	22/12/2009 14:31	429.14	United Kingdom
84	493261	DOT	DOTCOM POSTAGE		1	22/12/2009 14:48	88.48	United Kingdom
17	493264	DOT	DOTCOM POSTAGE		1	22/12/2009 15:04	123.96	United Kingdom
18	493265	M	Manual		2	22/12/2009 15:05	4	United Kingdom
19	493265	DOT	DOTCOM POSTAGE		1	22/12/2009 15:05	167.52	United Kingdom
35	493267	М	Manual		1	22/12/2009 15:06	4	United Kingdom
36	493267	DOT	DOTCOM POSTAGE		1	22/12/2009 15:06	122.3	United Kingdom
80	493269	DOT	DOTCOM POSTAGE		1	22/12/2009 15:07	114.26	United Kingdom
8	493271	DOT	DOTCOM POSTAGE		1	22/12/2009 15:08	102.52	United Kingdom
55	493273	DOT	DOTCOM POSTAGE		1	22/12/2009 15:09	155.35	United Kingdom
9	493276	DOT	DOTCOM POSTAGE		1	22/12/2009 15:10	110.22	United Kingdom
2	493283	M	Manual		2	22/12/2009 15:12	4	United Kingdom
3	493283	DOT	DOTCOM POSTAGE		1	22/12/2009 15:12	136.52	United Kingdom
1	493290	DOT	DOTCOM POSTAGE		1	22/12/2009 15:13	3.43	United Kingdom
5	493287	М	Manual		1	22/12/2009 15:13	4	United Kingdom
6	493287	DOT	DOTCOM POSTAGE		1	22/12/2009 15:13	100.7	United Kingdom
0	493288	DOT	DOTCOM POSTAGE		1	22/12/2009 15:13	34.13	United Kingdom
6	493294	TEST002			1	22/12/2009 15:15	0	United Kingdom
5	493308	C2	CARRIAGE		1	22/12/2009 16:17	50	15064 United Kingdom
4 (2493373	D	Discount		-1	23/12/2009 11:22	64.37	15044 United Kingdom
3	493404	DOT	DOTCOM POSTAGE		1	23/12/2009 15:30	184.68	United Kingdom
4	493404	gift_0001_30	Dotcomgiftshop Gift Voucher £30.00		1	23/12/2009 15:30	26.08	United Kingdom
5		gift 0001 20	Dotcomgiftshop Gift Voucher £20.00		1	23/12/2009 15:30	17.39	United Kingdom
0		TEST001	This is a test product.		5	4/1/2010 9:24	4.5	12346 United Kingdom
2	493412	TEST001	This is a test product.		5	4/1/2010 9:53	4.5	12346 United Kingdom
8 (2493538	POST	POSTAGE		-1	4/1/2010 15:35	50	17949 United Kingdom
1	493759	М	Manual		3	6/1/2010 13:56	1.25	17965 United Kingdom
7	493806	POST	POSTAGE		1	7/1/2010 11:31	18	17404 Sweden
6 0	2493853	POST	POSTAGE		-1	7/1/2010 15:54	7.06	16325 United Kingdom
2	493876		POSTAGE		1	7/1/2010 18:38	1	12648 Germany
0	493897		Manual		1	8/1/2010 10:39	780.52	14911 EIRE
-	2493898	M	Manual		-1	8/1/2010 10:40	780.52	14911 EIRE
3	493899		POSTAGE		3	8/1/2010 10:43	15	12417 Belgium
0	493900		Manual		1	8/1/2010 10:44	780.52	14911 EIRE
7	493924		POSTAGE		1	8/1/2010 11:25	180	12678 France

Step 5: Change the case of the description. Some of the descriptions have different case, hence I will make them uniform.

K	L
Description	Description
5CM CHRISTMAS GLASS BALL 20 LIGHTS	=PROPER(K2)
PINK CHERRY LIGHTS	Pink Cherry Lights
WHITE CHERRY LIGHTS	White Cherry Lights
RECORD FRAME 7" SINGLE SIZE	
TRAWBERRY CERAMIC TRINKET BOX	
PINK DOUGHNUT TRINKET POT	
SAVE THE PLANET MUG	

Step 6: Remove extra spaces using TRIM

L	М
Description	Description
15Cm Christmas Glass Ball 20 Lights	=TRIM(L2)
Pink Cherry Lights	
White Cherry Lights	
Record Frame 7" Single Size	
Strawherry Ceramic Trinket Box	

Step 7: Remove negative values from the quantity column and replace it as 0. For this we will create a column next to quantity and insert the below formulae

= IF(D3<=0, 0,D3)

This will remove all the negative and zero quantity values in the table.

Α	В	С	D	E	F	G	Н
Invoice	StockCode	Description	Quantity	InvoiceDate	Price	Customer ID	Country
489450	21895	Potting Shed Sow 'N' Grow Set	4	1/12/2009 10:36	4.25	16321	Australia
489450	21896	Potting Shed Twine	6	1/12/2009 10:36	2.1	16321	Australia
489450	22083	Paper Chain Kit Retro Spot	12	1/12/2009 10:36	2.95	16321	Australia
489450	21871	Save The Planet Mug	12	1/12/2009 10:36	1.25	16321	Australia
489450	84946	Antique Silver Tea Glass Etched	12	1/12/2009 10:36	1.25	16321	Australia
489450	84970S	Hanging Heart Zinc T-Light Holder	24	1/12/2009 10:36	0.85	16321	Australia
489450	22090	Paper Bunting Retro Spots	12	1/12/2009 10:36	2.95	16321	Australia
C489459	90200A	Purple Sweetheart Bracelet	-3	1/12/2009 10:44	4.25	17592	United Kingdom
C489459	90200D	Pink Sweetheart Bracelet	-3	1/12/2009 10:44	4.25	17592	United Kingdom
C489459	90200B	Black Sweetheart Bracelet	-3	1/12/2009 10:44	4.25	17592	United Kingdom
C489459	90200E	Green Sweetheart Bracelet	-3	1/12/2009 10:44	4.25	17592	United Kingdom
C489459	90200C	Blue Sweetheart Bracelet	-3	1/12/2009 10:44	4.25	17592	United Kingdom
C489459	90185C	Black Diamante Expandable Ring	-3	1/12/2009 10:44	4.25	17592	United Kingdom
C489459	90185B	Amethyst Diamante Expandable Ring	-3	1/12/2009 10:44	4.25	17592	United Kingdom

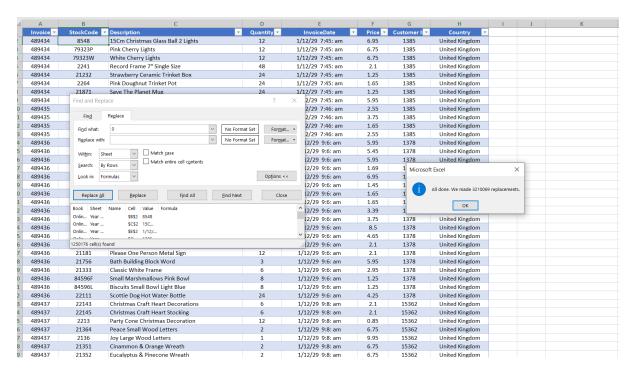
Step 8: Use find and replace function to clean data:

Remove the descriptions for postages, manual, lost, discount and damages. Do CLTR + F this will find all the words in the table and replace it with the value you need. In this case, I want to find all the words describing "manual"

	***	1		-,	, 2000 2			oougoo	1	
489609	DOT	Dotcom	1	1/12	2/2009 14:50	74.61		United Kingdom		
489609	18098c	Porcelain Butterfly Oil Burner	2	1/12	2/2009 14:50	5.17		United Kingdom		
489609	20615	Blue Spotty Passport Cover	1	1/12	2/2009 14:50	4.3		United Kingdom		
489609	20804	Glass Chicken Butter Dish	1	1/12	2/2009 14:50	3.43		United Kingdom		
489609	21041	Red Spotty Oven Glove Double	1	1/12	2/2009 14:50	6.04		United Kingdom		
489609	21116	Owl Doorstop	2	1/12	2/2009 14:50	8.65		United Kingdom		
489609	21186	White Dove Honeycomb Paper Garland	1	1/12	2/2009 14:50	3.43		United Kingdom		
489609	21247	Set Of Red Salad Servers	1	1/12	2/2009 14:50	3.43		United Kingdom		
489609	21328	Balloons Writing Set	1	1/12	2/2009 14:50	3.43		United Kingdom		
489609	Find and Replace		7	×	2009 14:50	13.87		United Kingdom		
489609	Title alle Hepiaee				2009 14:50	7.78		United Kingdom		
489609	Find Replace				2009 14:50	10.39		United Kingdom		
489609			$\overline{}$		2009 14:50	4.3		United Kingdom		
489609	Find what: manua	No For	rmat Set For <u>m</u> a	t •	2009 14:50	3.43		United Kingdom		
489609	Replace with:	∨ No For	rmat Set For <u>m</u> a	t	2009 14:50	7.78		United Kingdom		
489609		✓ Match case			2009 14:50	7.78	Microsof	ft Excel	×	
489609	Within: Sheet	Match entire cell contents			2009 14:50	6.04				
489609	Search: By Rows	✓ Match entire cell contents			2009 14:50	13.87		All done. We made 854 replacements.		
489609	Look in: Formulas	~	Options <	nns ««	2009 14:50	3.43		All dolle. We flade 654 replace		
489609			- 12	_	2009 14:50	6.04		ОК		
489609	Replace All	Replace Find All Eind Nex	xt Clos		2009 14:50	4.3				
489609	керіасе дії	Replace Find All Find Nex	tt Clos	е	2009 14:50	16.48		United Kingdom		
489609	Book Sheet Name	Cell Value Formula		^	2009 14:50	17.35		United Kingdom		
489609	onlin Year	\$C			2009 14:50	8.65		United Kingdom		
489609	onlin Year	\$C			2009 14:50	21.7		United Kingdom		
489609	onlin Year	\$C		~	2009 14:50	13.87		United Kingdom		
C489610 8	354 cell(s) found				2009 14:52	6.75	17485	United Kingdom		
C489610	22164	String Of Stars Card Holder		1/12	2/2009 14:52	2.95	17485	United Kingdom		
C489610	21892	Traditional Wooden Catch Cup Game		1/12	2/2009 14:52	1.25	17485	United Kingdom		

And replace it with nothing. Leave it blank.

Step 9: Remove all the blank cells and rows using Goto function.



Let's now proceed to delete all the blank cell now.

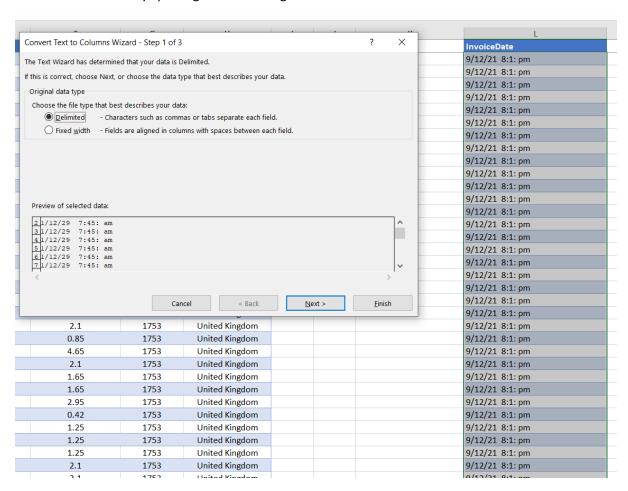
Step 10: Check the filter under description and see for any odd/irrelevant items and similarly delete the data

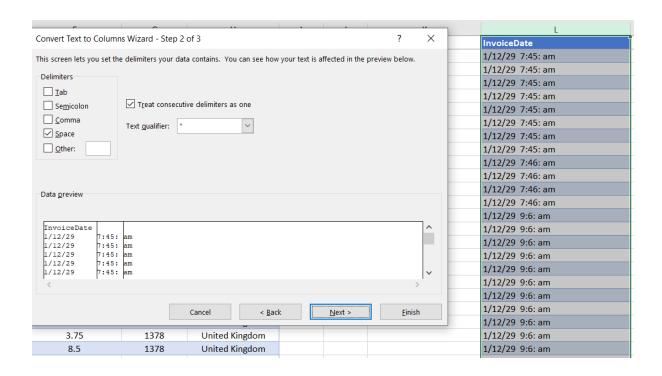
1	Invoice *	StockCode 💌	Description	T	Quantity	InvoiceDate	▼ Price ▼	Customer I	Country
28019	492718	TEST1	This Is A Test Product.		5	18/12/29 1:47: am	4.5	12346	United Kingdom
28030	492722	TEST2	This Is A Test Product.		1	18/12/29 1:55: am	1	12346	United Kingdom
30716	49341	TEST1	This Is A Test Product.		5	4/1/21 9:24: am	4.5	12346	United Kingdom
30717	493412	TEST1	This Is A Test Product.		5	4/1/21 9:53: am	4.5	12346	United Kingdom
37186	49445	TEST1	This Is A Test Product.		5	14/1/21 1:5: pm	4.5	12346	United Kingdom
44097	495295	TEST1	This Is A Test Product.		5	22/1/21 1:3: pm	4.5	12346	United Kingdom
48119	495733	ADJUST	Adjustment By John On 26/1/21 16		1	26/1/21 4:21: pm	68.34	14911	EIRE
48120	495735	ADJUST	Adjustment By John On 26/1/21 16		1	26/1/21 4:22: pm	21.56	12745	EIRE
48121	495734	ADJUST	Adjustment By John On 26/1/21 16		1	26/1/21 4:22: pm	25.82	14911	EIRE
48122	495736	ADJUST	Adjustment By John On 26/1/21 16		1	26/1/21 4:23: pm	21	1266	Spain
48123	495742	ADJUST	Adjustment By John On 26/1/21 16		1	26/1/21 4:25: pm	63.24	1244	Finland
48158	495745	ADJUST	Adjustment By John On 26/1/21 16		1	26/1/21 4:26: pm	56.73	12466	France
48159	495748	ADJUST	Adjustment By John On 26/1/21 16		1	26/1/21 4:26: pm	117.72	16291	Portugal
48169	495747	ADJUST	Adjustment By John On 26/1/21 16		1	26/1/21 4:26: pm	129.23	12555	Spain
48170	49575	ADJUST	Adjustment By John On 26/1/21 16		1	26/1/21 4:27: pm	132.79	14156	EIRE
48171	495756	ADJUST	Adjustment By John On 26/1/21 16		1	26/1/21 4:29: pm	39.67	14912	Italy
48172	495755	ADJUST	Adjustment By John On 26/1/21 16		1	26/1/21 4:29: pm	342.8	14413	United Kingdom
48173	495753	ADJUST	Adjustment By John On 26/1/21 16		1	26/1/21 4:29: pm	178.31	14653	United Kingdom
48174	495754	ADJUST	Adjustment By John On 26/1/21 16		1	26/1/21 4:29: pm	15.58	12846	United Kingdom
48175	495758	ADJUST	Adjustment By John On 26/1/21 16		1	26/1/21 4:3: pm	274.2	14911	EIRE
48176	49576	ADJUST	Adjustment By John On 26/1/21 16		1	26/1/21 4:31: pm	64.13	14156	EIRE
48177	495763	ADJUST	Adjustment By John On 26/1/21 16		1	26/1/21 4:34: pm	17.14	1647	EIRE
48179	495766	ADJUST	Adjustment By John On 26/1/21 16		1	26/1/21 4:38: pm	84.58	1279	Germany
48180	495773	ADJUST	Adjustment By John On 26/1/21 16		1	26/1/21 4:57: pm	4.57	126	Germany
48181	495776	ADJUST	Adjustment By John On 26/1/21 17		1	26/1/21 5:3: pm	49.35	1794	United Kingdom
48182	495777	ADJUST	Adjustment By John On 26/1/21 17		1	26/1/21 5:5: pm	179.45	14156	EIRE
48183	49578	ADJUST	Adjustment By John On 26/1/21 17		1	26/1/21 5:8: pm	16.33	17867	United Kingdom
48184	495782	ADJUST	Adjustment By John On 26/1/21 17		1	26/1/21 5:1: pm	139.71	14156	EIRE
48185	495783	ADJUST	Adjustment By John On 26/1/21 17		1	26/1/21 5:11: pm	48.96	1438	United Kingdom
48186	495784	ADJUST	Adjustment By John On 26/1/21 17		1	26/1/21 5:11: pm	11.31	14156	EIRE
48187	495788	ADJUST	Adjustment By John On 26/1/21 17		1	26/1/21 5:16: pm	11.9	14156	EIRE
48188	495791	ADJUST	Adjustment By John On 26/1/21 17		1	26/1/21 5:19: pm	243.63	1479	United Kingdom
48189	495792	ADJUST	Adjustment By John On 26/1/21 17		1	26/1/21 5:2: pm	114.89	17672	United Kingdom
48190	495794	ADJUST	Adjustment By John On 26/1/21 17		1	26/1/21 5:22: pm	41.9	12471	Germany
48191	495795	ADJUST	Adjustment By John On 26/1/21 17		1	26/1/21 5:23: pm	27.82	1572	Nigeria
48192	495799	ADJUST	Adjustment By John On 26/1/21 17		1	26/1/21 5:26: pm	81.61	13327	United Kingdom
48193	49581	ADJUST	Adjustment By John On 26/1/21 17		1	26/1/21 5:28: pm	77.52	1257	Spain
48194	49582	ADJUST	Adjustment By John On 26/1/21 17		1	26/1/21 5:28: pm	387.54	12748	United Kingdom
66379	498269	BANK CHARGES	Bank Charges		1	17/2/21 3:3: pm	15	16928	United Kingdom
108417	53497	BANK CHARGES	Bank Charges		1	1/4/21 12:7: pm	15	17539	United Kingdom
112645	5396	BANK CHARGES	Bank Charges		1	8/4/21 4:5: pm	15	12843	United Kingdom
114826	54188	TEST1	This Is A Test Product.		5	12/4/21 9:52: am	4.5	16454	United Kingdom
123601	5524	BANK CHARGES	Bank Charges		1	2/4/21 4:24: pm	15	17448	United Kingdom

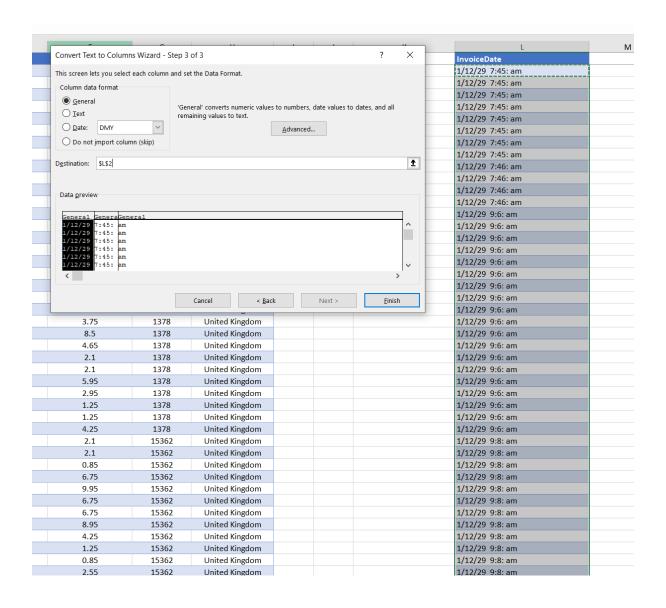
Step 11: Under the Invoice date column, there is an error in the way the year is recorded. Its recorded as 29 instead of 2009 and 21

1	Invoice 🕶	StockCode	▼ Description	J	Quantity	InvoiceDate 💌	Price 💌	Customer I	Country
28019	492718	TEST1	This Is A Test Product.		5	18/12/29 1:47: am	4.5	12346	United Kingdom
28030	492722	TEST2	This Is A Test Product.		1	18/12/29 1:55: am	1	12346	United Kingdom
30716	49341	TEST1	This Is A Test Product.		5	4/1/21 9:24: am	4.5	12346	United Kingdom
30717	493412	TEST1	This Is A Test Product.		5	4/1/21 9:53: am	4.5	12346	United Kingdom
37186	49445	TEST1	This Is A Test Product.		5	14/1/21 1:5: pm	4.5	12346	United Kingdom
44097	495295	TEST1	This Is A Test Product.		5	22/1/21 1:3: pm	4.5	12346	United Kingdom
48119	495733	ADJUST	Adjustment By John On 26/1/21 16		1	26/1/21 4:21: pm	68.34	14911	EIRE
48120	495735	ADJUST	Adjustment By John On 26/1/21 16		1	26/1/21 4:22: pm	21.56	12745	EIRE
48121	495734	ADJUST	Adjustment By John On 26/1/21 16		1	26/1/21 4:22: pm	25.82	14911	EIRE
48122	495736	ADJUST	Adjustment By John On 26/1/21 16		1	26/1/21 4:23: pm	21	1266	Spain
48123	495742	ADJUST	Adjustment By John On 26/1/21 16		1	26/1/21 4:25: pm	63.24	1244	Finland
48158	495745	ADJUST	Adjustment By John On 26/1/21 16		1	26/1/21 4:26: pm	56.73	12466	France
48159	495748	ADJUST	Adjustment By John On 26/1/21 16		1	26/1/21 4:26: pm	117.72	16291	Portugal
48169	495747	ADJUST	Adjustment By John On 26/1/21 16		1	26/1/21 4:26: pm	129.23	12555	Spain
48170	49575	ADJUST	Adjustment By John On 26/1/21 16		1	26/1/21 4:27: pm	132.79	14156	EIRE
48171	495756	ADJUST	Adjustment By John On 26/1/21 16		1	26/1/21 4:29: pm	39.67	14912	Italy
48172	495755	ADJUST	Adjustment By John On 26/1/21 16		1	26/1/21 4:29: pm	342.8	14413	United Kingdom
48173	495753	ADJUST	Adjustment By John On 26/1/21 16		1	26/1/21 4:29: pm	178.31	14653	United Kingdom
48174	495754	ADJUST	Adjustment By John On 26/1/21 16		1	26/1/21 4:29: pm	15.58	12846	United Kingdom
48175	495758	ADJUST	Adjustment By John On 26/1/21 16		1	26/1/21 4:3: pm	274.2	14911	EIRE
48176	49576	ADJUST	Adjustment By John On 26/1/21 16		1	26/1/21 4:31: pm	64.13	14156	EIRE
48177	495763	ADJUST	Adjustment By John On 26/1/21 16		1	26/1/21 4:34: pm	17.14	1647	EIRE
48179	495766	ADJUST	Adjustment By John On 26/1/21 16		1	26/1/21 4:38: pm	84.58	1279	Germany
48180	495773	ADJUST	Adjustment By John On 26/1/21 16		1	26/1/21 4:57: pm	4.57	126	Germany
48181	495776	ADJUST	Adjustment By John On 26/1/21 17		1	26/1/21 5:3: pm	49.35	1794	United Kingdom
48182	495777	ADJUST	Adjustment By John On 26/1/21 17		1	26/1/21 5:5: pm	179.45	14156	EIRE
48183	49578	ADJUST	Adjustment By John On 26/1/21 17		1	26/1/21 5:8: pm	16.33	17867	United Kingdom

We can correct this by splitting the cells using the Delimiters Function. Select the column > data> text to column







L	M	N	0
InvoiceDate			
1/12/29 7:45: am	1/12/2029	7:45	am
1/12/29 7:45: am	1/12/2029	7:45	am
1/12/29 7:45: am	1/12/2029	7:45	am
1/12/29 7:45: am	1/12/2029	7:45	am
1/12/29 7:45: am	1/12/2029	7:45	am
1/12/29 7:45: am	1/12/2029	7:45	am
1/12/29 7:45: am	1/12/2029	7:45	am
1/12/29 7:45: am	1/12/2029	7:45	am
1/12/29 7:46: am	1/12/2029	7:46	am
1/12/29 7:46: am	1/12/2029	7:46	am
1/12/29 7:46: am	1/12/2029	7:46	am
1/12/29 7:46: am	1/12/2029	7:46	am
1/12/29 9:6: am	1/12/2029	9:06	am
1/12/29 9:6: am	1/12/2029	9:06	am
1/12/29 9:6: am	1/12/2029	9:06	am
1/12/29 9:6: am	1/12/2029	9:06	am
1/12/29 9:6: am	1/12/2029	9:06	am
1/12/29 9:6: am	1/12/2029	9:06	am
1/12/29 9:6: am	1/12/2029	9:06	am

Now to correct the date to the right format:

Ĺ	M	N	0	
InvoiceDate				
1/12/29 7:45: am	1/12/2029	=DATE(2009,MONTH	H(M2),DAY(M2))	a
1/12/29 7:45: am	1/12/2029	1/12/2009	7:45	a
1/12/29 7:45: am	1/12/2029	1/12/2009	7:45	a
1/12/29 7:45: am	1/12/2029	1/12/2009	7:45	a
1/12/29 7:45: am	1/12/2029	1/12/2009	7:45	a
1/12/29 7:45: am	1/12/2029	1/12/2009	7:45	a

Let's not forget there is 2010 too so don't copy the format till the end of the column



Step 12: Change the price column format to sterlings

T-0		. [A	-				
F2	T	X \	<i>fx</i> 6.95					
4	A	В	C	D	E	F	G	Н
1	Invoice	StockCode	Description Class B. H. 24 i Lt.	Quantity	InvoiceDate	Price	Customer ID	Country
3	489434 489434	8548 79323P	15Cm Christmas Glass Ball 2 Lights	12 12	1/12/2009 1/12/2009	£6.95 £6.75	1385 1385	United Kingdom
			Pink Cherry Lights					United Kingdom
4	489434	79323W	White Cherry Lights	12	1/12/2009	£6.75	1385	United Kingdom
5	489434	2241	Record Frame 7" Single Size	48	1/12/2009	£2.10	1385	United Kingdom
6	489434	21232	Strawberry Ceramic Trinket Box	24	1/12/2009	£1.25	1385	United Kingdom
7	489434	2264	Pink Doughnut Trinket Pot	24	1/12/2009	£1.65	1385	United Kingdom
8	489434	21871	Save The Planet Mug	24	1/12/2009	£1.25	1385	United Kingdom
9	489434	21523	Fancy Font Home Sweet Home Doormat	1	1/12/2009	£5.95	1385	United Kingdom
10	489435	2235	Cat Bowl	12	1/12/2009	£2.55	1385	United Kingdom
11	489435	22349	Dog Bowl , Chasing Ball Design	12	1/12/2009	£3.75	1385	United Kingdom
12	489435	22195	Heart Measuring Spoons Large	24	1/12/2009	£1.65	1385	United Kingdom
13	489435	22353	Lunchbox With Cutlery Fairy Cakes	12	1/12/2009	£2.55	1385	United Kingdom
14	489436	48173C	Door Mat Black Flock	1	1/12/2009	£5.95	1378	United Kingdom
15	489436	21755	Love Building Block Word	18	1/12/2009	£5.45	1378	United Kingdom
16	489436	21754	Home Building Block Word	3	1/12/2009	£5.95	1378	United Kingdom
17	489436	84879	Assorted Colour Bird Ornament	16	1/12/2009	£1.69	1378	United Kingdom
18	489436	22119	Peace Wooden Block Letters	3	1/12/2009	£6.95	1378	United Kingdom
19	489436	22142	Christmas Craft White Fairy	12	1/12/2009	£1.45	1378	United Kingdom
20	489436	22296	Heart Ivory Trellis Large	12	1/12/2009	£1.65	1378	United Kingdom
21	489436	22295	Heart Filigree Dove Large	12	1/12/2009	£1.65	1378	United Kingdom
22	489436	2219	Full English Breakfast Plate	16	1/12/2009	£3.39	1378	United Kingdom
23	489436	2217	Pizza Plate In Box	4	1/12/2009	£3.75	1378	United Kingdom
24	489436	22194	Black Diner Wall Clock	2	1/12/2009	£8.50	1378	United Kingdom
25	489436	354B	Set Of 3 Black Flying Ducks	12	1/12/2009	£4.65	1378	United Kingdom
26	489436	82582	Area Patrolled Metal Sign	12	1/12/2009	£2.10	1378	United Kingdom
27	489436	21181	Please One Person Metal Sign	12	1/12/2009	£2.10	1378	United Kingdom

Step 13: Change the price column format to sterlings and add a new total price column. Create a new column saying total price, the reason we are doing this is to find the volume generated from specific countries

Α	В	С	D	E	F	G	н	1
Invoice 🕶	StockCode -	Description -	Quantity 💌	InvoiceDate 🔻	Unit Price 💌	Customer ID 💌	Total price 💌	Country
489434	8548	15Cm Christmas Glass Ball 2 Lights	12	1/12/2009	£6.95	1385	£83.40	United Kingdom
489434	79323P	Pink Cherry Lights	12	1/12/2009	£6.75	1385	£81.00	United Kingdom
489434	79323W	White Cherry Lights	12	1/12/2009	£6.75	1385	£81.00	United Kingdom
489434	2241	Record Frame 7" Single Size	48	1/12/2009	£2.10	1385	£100.80	United Kingdom
489434	21232	Strawberry Ceramic Trinket Box	24	1/12/2009	£1.25	1385	£30.00	United Kingdom
489434	2264	Pink Doughnut Trinket Pot	24	1/12/2009	£1.65	1385	£39.60	United Kingdom
489434	21871	Save The Planet Mug	24	1/12/2009	£1.25	1385	£30.00	United Kingdom
489434	21523	Fancy Font Home Sweet Home Doormat	1	1/12/2009	£5.95	1385	£5.95	United Kingdom
489435	2235	Cat Bowl	12	1/12/2009	£2.55	1385	£30.60	United Kingdom
489435	22349	Dog Bowl , Chasing Ball Design	12	1/12/2009	£3.75	1385	£45.00	United Kingdom
489435	22195	Heart Measuring Spoons Large	24	1/12/2009	£1.65	1385	£39.60	United Kingdom
489435	22353	Lunchbox With Cutlery Fairy Cakes	12	1/12/2009	£2.55	1385	£30.60	United Kingdom
489436	48173C	Door Mat Black Flock	1	1/12/2009	£5.95	1378	£5.95	United Kingdom
489436	21755	Love Building Block Word	18	1/12/2009	£5.45	1378	£98.10	United Kingdom
489436	21754	Home Building Block Word	3	1/12/2009	£5.95	1378	£17.85	United Kingdom
489436	84879	Assorted Colour Bird Ornament	16	1/12/2009	£1.69	1378	£27.04	United Kingdom
489436	22119	Peace Wooden Block Letters	3	1/12/2009	£6.95	1378	£20.85	United Kingdom
489436	22142	Christmas Craft White Fairy	12	1/12/2009	£1.45	1378	£17.40	United Kingdom
489436	22296	Heart Ivory Trellis Large	12	1/12/2009	£1.65	1378	£19.80	United Kingdom
489436	22295	Heart Filigree Dove Large	12	1/12/2009	£1.65	1378	£19.80	United Kingdom
489436	2219	Full English Breakfast Plate	16	1/12/2009	£3.39	1378	£54.24	United Kingdom
489436	2217	Pizza Plate In Box	4	1/12/2009	£3.75	1378	£15.00	United Kingdom
489436	22194	Black Diner Wall Clock	2	1/12/2009	£8.50	1378	£17 00	United Kingdom

Step 14: Find duplicate values and deleting it

Find and highlighting duplicate rows

- In an adjacent column, use the following formula: =CONCATENATE(A2,B2,C2,D2,E2,F2,G2,H2,I2) Drag this down for all the rows. This formula combines all the cell values as a single string.
- Select the data L2:L406580
- With the data selected, go to home ->Conditional Formatting -> Highlight Cell Rules -> Duplicate Values.
- In the Duplicate Values dialog box, make sure Duplicate is selected and then specify the color in which you want to highlight the duplicate values.
- This would highlight the duplicate values in column L

- 4	В	C	D	E	F	G	Н	1	J K	L
1	StockCode *	Description	■ Quantity ■	InvoiceDate -	Unit Price	Customer ID *	Total price 💌	Country	-	Results
106430	22749	Feltcraft Princess Charlotte Doll	3	9/12/2010	£3.75	14713	£11.25	United Kingdom		53816722749Feltcraft Princess Charlotte Doll3405213.751471311.25United Kingdom
106431	2275	Feltcraft Princess Lola Doll	3	9/12/2010	£3.75	14713	£11.25	United Kingdom		5381672275Feltcraft Princess Lola Doll3405213.751471311.25United Kingdom
106432	22383	Lunch Bag Suki Design	2	9/12/2010	£1.65	14713	£3.30	United Kingdom		53816722383Lunch Bag Suki Design2405211.65147133.3United Kingdom
106433	2724	Red Retrospot Charlotte Bag	3	9/12/2010	£0.85	14713	£2.55	United Kingdom		5381672724Red Retrospot Charlotte Bag3405210.85147132.55United Kingdom
106434	2728	Lunch Bag Cars Blue	3	9/12/2010	£1.65	14713	£4.95	United Kingdom		5381672728Lunch Bag Cars Blue3405211.65147134.95United Kingdom
106435	2727	Lunch Bag Black Skull.	3	9/12/2010	£1.65	14713	£4.95	United Kingdom		5381672727Lunch Bag Black Skull.3405211.65147134.95United Kingdom
106436	2719	Woodland Charlotte Bag	3	9/12/2010	£0.85	14713	£2.55	United Kingdom		5381672719Woodland Charlotte Bag3405210.85147132.55United Kingdom
106437	82483	Wood 2 Drawer Cabinet White Finish	1	9/12/2010	£5.95	14713	£5.95	United Kingdom		53816782483Wood 2 Drawer Cabinet White Finish1405215.95147135.95United Kingdon
106438	12	Inflatable Political Globe	12	9/12/2010	£0.85	14713	£10.20	United Kingdom		53816712Inflatable Political Globe12405210.851471310.2United Kingdom
106439	21479	White Skull Hot Water Bottle	1	9/12/2010	£3.75	14713	£3.75	United Kingdom		53816721479White Skull Hot Water Bottle1405213.75147133.75United Kingdom
106440	22111	Scottie Dog Hot Water Bottle	2	9/12/2010	£4.95	14713	£9.90	United Kingdom		53816722111Scottie Dog Hot Water Bottle2405214.95147139.9United Kingdom
106441	8432A	Charlie+Lola Pink Hot Water Bottle	2	9/12/2010	£2.95	14713	£5.90	United Kingdom		5381678432ACharlie+Lola Pink Hot Water Bottle2405212.95147135.9United Kingdom
106442	22113	Grey Heart Hot Water Bottle	6	9/12/2010	£3.75	14713	£22.50	United Kingdom		53816722113Grey Heart Hot Water Bottle6405213.751471322.5United Kingdom
106443	2748	Kensington Coffee Set	1	9/12/2010	£12.75	14713	£12.75	United Kingdom		5381672748Kensington Coffee Set14052112.751471312.75United Kingdom
106444	22367	Childrens Apron Spaceboy Design	2	9/12/2010	£1.95	14713	£3.90	United Kingdom		53816722367Childrens Apron Spaceboy Design2405211.95147133.9United Kingdom
106445	47591D	Pink Fairy Cake Childrens Apron	2	9/12/2010	£1.95	14713	£3.90	United Kingdom		53816747591DPink Fairy Cake Childrens Apron2405211.95147133.9United Kingdom
106446	2236	Silver Mug Bone China Tree Of Life	4	9/12/2010	£1.95	14713	£7.80	United Kingdom		5381672236Silver Mug Bone China Tree Of Life4405211.95147137.8United Kingdom
106447	21914	Blue Harmonica In Box	12	9/12/2010	£1.25	14713	£15.00	United Kingdom		53816721914Blue Harmonica In Box12405211.251471315United Kingdom
106448	2278	Ribbon Reel Lace Design	5	9/12/2010	£2.10	1472	£10.50	United Kingdom		5381682278Ribbon Reel Lace Design5405212.1147210.5United Kingdom
106449	2282	Ribbon Reel Stripes Design	1	9/12/2010	£1.65	1472	£1.65	United Kingdom		5381682282Ribbon Reel Stripes Design1405211.6514721.65United Kingdom
106450	22739	Ribbon Reel Christmas Sock Bauble	5	9/12/2010	£1.65	1472	£8.25	United Kingdom		53816822739Ribbon Reel Christmas Sock Bauble5405211.6514728.25United Kingdom
106451	22735	Ribbon Reel Socks And Mittens	5	9/12/2010	£1.65	1472	£8.25	United Kingdom		53816822735Ribbon Reel Socks And Mittens5405211.6514728.25United Kingdom
106452	2279	Ribbon Reel Hearts Design	5	9/12/2010	£1.65	1472	£8.25	United Kingdom		5381682279Ribbon Reel Hearts Design5405211.6514728.25United Kingdom
106453	8549E	Scandinavian Reds Ribbons	6	9/12/2010	£1.25	1472	£7.50	United Kingdom		5381688549EScandinavian Reds Ribbons6405211.2514727.5United Kingdom
106454	2291	Paper Chain Kit Vintage Christmas	9	9/12/2010	£2.95	1472	£26.55	United Kingdom		5381682291Paper Chain Kit Vintage Christmas9405212.95147226.55United Kingdom
106455	22952	6 Cake Cases Vintage Christmas	24	9/12/2010	£0.55	1472	£13.20	United Kingdom		538168229526 Cake Cases Vintage Christmas24405210.55147213.2United Kingdom
106456	21976	Pack Of 6 Mushroom Cake Cases	5	9/12/2010	£0.55	1472	£2.75	United Kingdom		53816821976Pack Of 6 Mushroom Cake Cases5405210.5514722.75United Kingdom
106457	22417	Pack Of 6 Spaceboy Cake Cases	2	9/12/2010	£0.55	1472	£1.10	United Kingdom		53816822417Pack Of 6 Spaceboy Cake Cases2405210.5514721.1United Kingdom
106458	21212	Pack Of 72 Retrospot Cake Cases	5	9/12/2010	£0.55	1472	£2.75	United Kingdom		53816821212Pack Of 72 Retrospot Cake Cases5405210.5514722.75United Kingdom
106459	22795	Sweetheart Recipe Book Stand	4	9/12/2010	£6.75	1472	£27.00	United Kingdom		53816822795Sweetheart Recipe Book Stand4405216.75147227United Kingdom
106460	22739	Ribbon Reel Christmas Sock Bauble	5	9/12/2010	£1.65	1472	£8.25	United Kingdom		53816822739Ribbon Reel Christmas Sock Bauble5405211.6514728.25United Kingdom
106461	84949	Silver Hanging T-Light Holder	6	9/12/2010	£1.65	1472	£9.90	United Kingdom		538168849495ilver Hanging T-Light Holder6405211.6514729.9United Kingdom
106462	84947	Antique Silver Tea Glass Engraved	6	9/12/2010	£1.25	1472	£7.50	United Kingdom		53816884947Antique Silver Tea Glass Engraved6405211.2514727.5United Kingdom
106463	21658	Glass Beurre Dish	2	9/12/2010	£3.95	1472	£7.90	United Kingdom		53816821658Glass Beurre Dish2405213.9514727.9United Kingdom
106464	84946	Antique Silver Tea Glass Etched	6	9/12/2010	£1.25	1472	£7.50	United Kingdom		53816884946Antique Silver Tea Glass Etched6405211.2514727.5United Kingdom
106465	22158	3 Hearts Hanging Decoration Rustic	2	9/12/2010	£2.95	1472	£5.90	United Kingdom		538168221583 Hearts Hanging Decoration Rustic2405212.9514725.9United Kingdom
106466	22851	Set 2 Napkins Fairy Cakes Design	2	9/12/2010	£0.85	1472	£1.70	United Kingdom		53816822851Set 2 Napkins Fairy Cakes Design2405210.8514721.7United Kingdom
106467	22144	Christmas Craft Little Friends	6	9/12/2010	£2.10	1472	£12.60	United Kingdom		53816822144Christmas Craft Little Friends6405212.1147212.6United Kingdom
106468	22141	Christmas Craft Tree Top Angel	6	9/12/2010	£2.10	1472	£12.60	United Kingdom		53816822141Christmas Craft Tree Top Angel6405212.1147212.6United Kingdom
106469	22731	3D Christmas Stamps Stickers	9	9/12/2010	£1.25	1472	£11.25	United Kingdom		538168227313D Christmas Stamps Stickers9405211.25147211.25United Kingdom
106470	843E	English Rose Hot Water Bottle	2	9/12/2010	£4.25	1472	£8.50	United Kingdom		538168843EEnglish Rose Hot Water Bottle2405214.2514728.5United Kingdom
106471	8429E	Red Woolly Hottie White Heart.	2	9/12/2010	£3.75	1472	£7.50	United Kingdom		5381688429ERed Woolly Hottie White Heart.2405213.7514727.5United Kingdom
106472	21485	Retrospot Heart Hot Water Bottle	4	9/12/2010	£4.95	1472	£19.80	United Kingdom		53816821485Retrospot Heart Hot Water Bottle4405214.95147219.8United Kingdom