

WEEK 6 ASSIGNMENT DATA ANALYTICS

TASK 1: Basic Excel Formulas

Calculate Total Sales using SUM()

```
=SUM(R2:R9994)
```

Total Sales	2296919
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Calculate Average Sales using AVERAGE()

```
=AVERAGE(R2:R9994)
```

Average Sales	229.8528
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Find the Highest and Lowest Sales using MAX() and MIN()

```
=MAX(R2:R9994)
```

```
=MIN(R2:R9994)
```

Highest Sales	22638.48
Lowest Sales	0.444

Count total number of sales records using: o COUNT() o COUNTA()

=COUNT(R2:R9995)	
=COUNTA(R2:R9994)	
Total number of Sales	9993
number of sales (use counta)	9993

TASK 2: Logical Functions

Use the IF() function to classify sales

=IF(R:R > 2000,"high","low")

Use AND() or OR() to create a condition-based column

=IF(AND(R:R >1000,U:U > 100),"Good Performance","Next time")
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TASK 3: Data Cleaning in Excel

Clean the Customer / Product Name column using: o TRIM() o PROPER()

BEFORE USE OF TRIM AND PROPER

Customer ID	Customer Name	Country	State	Postal Code	Region	Product ID	Category	Sub-Category	Product Name	Sales	Quantity	Discount	Profit	Performance	Performance2
11/6/2016 CG-13520	Claire Gute	United States	Kentucky	42482	South	FUR-CH-10000178	Furniture	Bookcases	Bush Somerset Cc	261.96	2	0	41.9136	low	Next time
11/6/2016 CG-13520	Claire Gute	United States	Kentucky	42482	South	FUR-CH-10000178	Furniture	Tables	Hon Deluxe Fabrics	712.96	3	0	219.382	low	Next time
10/11/2015 SO-20333	Diane Hoffmann	United States	Florida	33131	South	FUR-CH-10000178	Furniture	Tables	Hon Deluxe Fabrics	14.82	2	0	5.9264	low	Next time
10/11/2015 SO-20333	Diane Hoffmann	United States	Florida	33131	South	FUR-CH-10000178	Furniture	Tables	Brettford CR400 S	937.5775	3	0.45	383.031	low	Next time
10/9/2014 BH-21710	Brianna Hoffman	United States	California	90032	West	OFF-ST-10000376	Office Supply:Storage	Eldon Fold 'N Roll	22.48	2	0.2	2.5346	low	Next time	
6/9/2014 BH-21710	Brianna Hoffman	United States	California	90032	West	OFF-ST-10000376	Office Supply:Storage	Eldon Fold 'N Roll	48.49	7	0	18.596	low	Next time	
6/9/2014 BH-21710	Brianna Hoffman	United States	California	90032	West	OFF-ST-10000376	Office Supply:Art	Newell 322	7.28	4	0	3.0905	low	Next time	
6/9/2014 BH-21710	Brianna Hoffman	United States	California	90032	West	TEC-PH-10000227	Technology	Phones	Mitel 5320 IP Pho	907.132	6	0.2	90.732	low	Next time
6/9/2014 BH-21710	Brianna Hoffman	United States	California	90032	West	TEC-PH-10000227	Technology	Phones	Motorola MC220	12.24	3	0.2	4.074	low	Next time
6/9/2014 BH-21710	Brianna Hoffman	United States	California	90032	West	OFF-AP-10000285	Office Supply:Appliances	Belkin F5C209VTE	114.9	5	0	34.427	low	Next time	
6/9/2014 BH-21710	Brianna Hoffman	United States	California	90032	West	FUR-TA-10000159	Furniture	Tables	Chromcraft Recta	1706.16	9	0.2	65.392	low	Next time
6/9/2014 BH-21710	Brianna Hoffman	United States	California	90032	West	TEC-PH-10000227	Technology	Phones	Motorola MC220	9.64	4	0.2	3.214	low	Next time
4/25/2017 AA-10480	Andrew Allen	United States	North Carolina	28027	South	OFF-PA-10000236	Office Supply:Paper	Xerox 1967	35.52	3	0.2	5.4432	low	Next time	
12/5/2016 MM-50797	Irene Madeline	United States	Washington	98133	West	OFF-BI-10000309	Office Supply:Binders	Fellowes P20Z P	407.976	3	0.2	132.592	low	Next time	
12/2/2016 MM-50797	Irene Madeline	United States	Washington	98133	West	OFF-BI-10000309	Office Supply:Binders	Fellowes P20Z P	407.976	5	0.2	128.968	low	Next time	
12/2/2015 HP-14812	Harold Pavlens	United States	Texas	76205	Central	OFF-BI-10000374	Office Supply:Binders	Stow-D-Shur Shelf	2.544	3	0.0	0.878	low	Next time	
11/11/2014 PK-30975	Pete Kitz	United States	Wisconsin	53711	Central	OFF-ST-10000438	Office Supply:Storage	Stow-D-Shur Shelf	665.6	6	0	13.318	low	Next time	
5/13/2014 AG-10480	Alejandro Grone	United States	Alaska	99610	West	OFF-ST-10000438	Office Supply:Storage	Fellowes Super St	55.5	2	0	9.990	low	Next time	
8/27/2014 TD-21320	Zacharias Donnelly	United States	California	94399	West	OFF-ST-10000438	Office Supply:Storage	Fellowes Super St	5.5	2	0	2.260	low	Next time	
8/27/2014 TD-21320	Zacharias Donnelly	United States	California	94399	West	TEC-PH-100001948	Technology	Phones	Cisco SPA 3030 IP	213.3	3	0.2	16.011	low	Next time
8/27/2014 TD-21320	Zacharias Donnelly	United States	California	94399	West	OFF-BI-100002253	Office Supply:Binders	Wilson Jones Han	22.72	4	0.2	4.738	low	Next time	
12/9/2016 KB-16865	Ken Black	United States	Nebraska	68020	Central	OFF-AP-100001480	Office Supply:Appliances	Acro Six-Outlet Pl	19.49	7	0	5.8908	low	Next time	
12/9/2016 KB-16865	Ken Black	United States	Nebraska	68020	Central	OFF-AP-100001480	Office Supply:Appliances	Acro Six-Outlet Pl	60.34	7	0	15.6884	low	Next time	
7/16/2017 SF-20605	Sandra Flanagan	United States	Pennsylvania	19340	South	FUR-CH-10000274	Furniture	Chairs	Global Deluxe Sta	71.372	2	0.3	-1.036	low	Next time
8/2/2017 SF-20605	Sandra Flanagan	United States	Pennsylvania	19340	South	FUR-CH-10000274	Furniture	Chairs	Global Deluxe Sta	564.523	3	0	-1.788	low	Next time
1/16/2016 EH-13945	Eric Hoffmann	United States	California	90098	West	OFF-BI-100001843	Office Supply:Binders	Wilson Jones Art	11.948	2	0.2	4.2224	low	Next time	
1/16/2016 EH-13945	Eric Hoffmann	United States	California	90098	West	TEC-AC-100003027	Technology	Accessories	Imation RGB Mini	90.37	3	0	11.794	low	Next time
9/17/2015 TB-21320	Tracy Blumenthal	United States	Pennsylvania	19340	East	OFF-ST-10000438	Office Supply:Binders	Avery Recycled F	8.621	7	0.5	4.3108	low	Next time	
9/17/2015 TB-21320	Tracy Blumenthal	United States	Pennsylvania	19340	East	OFF-ST-10000438	Office Supply:Binders	Avery Recycled F	9.618	2	0.7	-7.032	low	Next time	
9/17/2015 TB-21320	Tracy Blumenthal	United States	Pennsylvania	19340	East	FUR-FU-10000484	Furniture	Furnishings	Howard Miller 13-	124.2	3	0.2	15.525	low	Next time
9/17/2015 TB-21320	Tracy Blumenthal	United States	Pennsylvania	19340	East	FUR-FU-10000484	Furniture	Furnishings	Howard Miller 13-	124.2	2	0.2	15.525	low	Next time
9/17/2015 TB-21320	Tracy Blumenthal	United States	Pennsylvania	19340	East	OFF-AP-100004062	Office Supply:Art	BOSTON Model 11	86.304	6	0.2	9.702	low	Next time	
9/17/2015 TB-21320	Tracy Blumenthal	United States	Pennsylvania	19340	East	OFF-AP-100004062	Office Supply:Binders	Acro Pressboard C	6.826	6	0.7	-5.757	low	Next time	
9/17/2015 TB-21320	Tracy Blumenthal	United States	Pennsylvania	19340	East	OFF-AP-100004062	Office Supply:Art	Acro Pressboard C	31.76	2	0.2	3.546	low	Next time	
10/19/2017 AA-17560	Matt Andriano	United States	Texas	77055	Central	OFF-PA-10000236	Office Supply:Paper	Easy-Stay paper	29.472	3	0.3	9.9486	low	Next time	

AFTER USE OF TRIM AND PROPER

Order Date	Customer ID	Customer Name	Country	State	Postal Code Region	Product ID	Category	Sub-Category	Product Name	Sales	Quantity	Discount	Profit	Performance	Performance 2	Customer Name (new)
11/8/2014 CG-12520	Claire Gute	United States Kentucky	42420 South	FUR-BQ-10001798	Furniture	Bookcases	Bush Somerset Cc	261.96	2	0	41,9136 low	Next time	Claire Gute			
11/8/2014 CG-12520	Claire Gute	United States Kentucky	42420 South	FUR-CR-10000454	Furniture	Chairs	Hon Deluxe Fabrici	711.94	3	0	215,582 low	Next time	Claire Gute			
11/8/2014 CG-12520	Darin Van Huff	United States Kentucky	40036 West	FUR-BQ-10001599	Furniture	Storage	Steel Adhesive Ad.	14.62	2	0	5,320 low	Next time	Darin Van Huff			
10/11/2015 SO-20335	Sean O'Donnell	United States Florida	33111 South	FUR-TA-10000777	Furniture	Tables	Bretford CR4500 S	957.5775	5	0.45	-383,031 low	Next time	Sean O'Donnell			
10/11/2015 SO-20335	Sean O'Donnell	United States Florida	33111 South	OFF-ST-10000700	Office Supplier	Storage	Eldon Fold 'N Roll	22.368	2	0.2	2,3164 low	Next time	Sean O'Donnell			
6/9/2014 BH-11729	Brosna Hoffman	United States California	90032 West	FUR-FU-10001487	Furniture	Furnishings	Edon Expressions	48.86	7	0	14,1959 low	Next time	Brosna Hoffman			
6/9/2014 BH-11729	Brosna Hoffman	United States California	90032 West	FUR-FU-10001487	Furniture	Furnishings	Edon Expressions	7.28	4	0	1,438 low	Next time	Brosna Hoffman			
6/9/2014 BH-11729	Brosna Hoffman	United States California	90032 West	TEC-PH-1000223	Technology	Phones	Mitel 5320 IP Pho	907.332	6	0.2	90,7132 low	Next time	Brosna Hoffman			
6/9/2014 BH-11729	Brosna Hoffman	United States California	90032 West	TEC-PH-1000223	Technology	Phones	DXL Angle-View E	18,504	3	0.2	5,782 low	Next time	Brosna Hoffman			
6/9/2014 BH-11729	Brosna Hoffman	United States California	90032 West	TEC-PH-1000223	Technology	Phones	Imation BGB Mini	114.3	5	0	3,436 low	Next time	Brosna Hoffman			
6/9/2014 BH-11729	Brosna Hoffman	United States California	90032 West	PUB-TA-10001339	Furniture	Tables	Chronocraft Recta	1706.184	9	0.2	85,392 low	Next time	Brosna Hoffman			
6/9/2014 BH-11729	Brosna Hoffman	United States California	90032 West	TEC-PH-1000234	Technology	Phones	Konftel 250 Conference	911.424	4	0.2	68,356 low	Next time	Brosna Hoffman			
4/15/2017 AA-10480	Andrew Allen	United States North Carolina	28027 South	OFF-ST-1000234	Office Supplier	Paper	Xerox 1961	15.552	3	0.2	5,442 low	Next time	Andrew Allen			
12/9/2015 SO-20335	Harold Pavlan	United States Washington	98106 Central	OFF-ST-10000700	Office Supplier	Storage	ProBoard P	407.79	3	0.2	12,231 low	Next time	Harold Pavlan			
12/23/2015 HP-14815	Harold Pavlan	United States Texas	76106 Central	OFF-AF-1002311	Office Supplier	Binders	Holmes Replacer	68.81	5	0.8	121,838 low	Next time	Harold Pavlan			
12/22/2015 HP-14815	Harold Pavlan	United States Texas	76106 Central	OFF-ST-1000075	Office Supplier	Binders	Stores DuraTech F	2.544	3	0.8	-3,816 low	Next time	Harold Pavlan			
11/11/2014 PG-19075	Pete Kitz	United States Wisconsin	53711 Central	OFF-ST-10000327	Office Supplier	Storage	Star-Drop Shelv	665.88	3	0	13,3176 low	Next time	Pete Kitz			
12/22/2015 AG-10270	Alejandro Grove	United States California	40036 West	OFF-ST-1000034	Office Supplier	Binders	Star-Drop Shelv	5.5	2	0	1,597 low	Next time	Alejandro Grove			
8/27/2014 ZD-21925	Zuschuss Donatelli	United States California	94109 West	OFF-AF-1000391	Office Supplier	Art	Newell Art	8.56	2	0	2,4824 low	Next time	Zuschuss Donatelli			
8/27/2014 ZD-21925	Zuschuss Donatelli	United States California	94109 West	OFF-AF-1000391	Office Supplier	Art	Wilson Jones Han	22.72	7	0.2	7,384 low	Next time	Zuschuss Donatelli			
8/27/2014 ZD-21925	Zuschuss Donatelli	United States California	94109 West	OFF-BI-10002115	Office Supplier	Binders	Wilson Jones Han	18.46	7	0	5,096 low	Next time	Zuschuss Donatelli			
12/9/2015 KB-16585	Ken Black	United States Nebraska	68025 Central	OFF-ST-10001492	Office Supplier	Appliances	Acco Six-Outlet Pi	66.34	7	0	15,6884 low	Next time	Ken Black			
7/16/2017 FF-20068	Sandra Flanagan	United States Pennsylvania	19140 East	FUR-CH-10002774	Furniture	Chairs	Global Deluxe Sta	71.372	2	0.3	-1,036 low	Next time	Sandra Flanagan			
7/16/2017 FF-20068	Sandra Flanagan	United States Pennsylvania	19140 East	FUR-CH-10002774	Furniture	Chairs	Global Deluxe Sta	100.43	3	0	30,108 low	Good Performance	Sandra Flanagan			
7/16/2017 FF-20068	Sandra Flanagan	United States Pennsylvania	19140 East	OFF-ST-10001492	Office Supplier	Binders	Wilson Jones Acti	11.448	2	0.2	4,2224 low	Next time	Eric Hoffmann			
7/16/2017 FF-20068	Sandra Flanagan	United States Pennsylvania	19140 East	OFF-ST-10001492	Office Supplier	Binders	Wilson Jones Acti	90.57	3	0	11,741 low	Next time	Eric Hoffmann			
7/17/2013 TB-21520	Tracy Blumstein	United States Pennsylvania	19140 East	FUR-BQ-10001334	Furniture	Furnishings	Recessed H	308.83	7	0.5	-165,05 high	Next time	Tracy Blumstein			
7/17/2013 TB-21520	Tracy Blumstein	United States Pennsylvania	19140 East	FUR-BQ-1000448	Furniture	Furnishings	Recessed H	12.08	2	0.7	2,624 low	Next time	Tracy Blumstein			
7/17/2013 TB-21520	Tracy Blumstein	United States Pennsylvania	19140 East	OFF-EN-10001509	Office Supplier	Envelopes	Poly String Tie Em	3,264	2	0.2	1,1016 low	Next time	Tracy Blumstein			
7/17/2013 TB-21520	Tracy Blumstein	United States Pennsylvania	19140 East	OFF-AF-10004642	Office Supplier	Art	BOSTON Model 11	86.304	6	0	9,792 low	Next time	Tracy Blumstein			
7/17/2013 TB-21520	Tracy Blumstein	United States Pennsylvania	19140 East	OFF-ST-10000756	Office Supplier	Binders	ProBoard P	4.628	6	0.2	1,373 low	Next time	Tracy Blumstein			
7/17/2013 TB-21520	Tracy Blumstein	United States Pennsylvania	19140 East	OFF-ST-10001488	Office Supplier	Art	Lumber Crayons	15.76	2	0.2	3,546 low	Next time	Tracy Blumstein			
7/17/2013 TB-21520	Tracy Blumstein	United States Pennsylvania	19140 East	OFF-ST-10000249	Office Supplier	Paper	Easy-staple paper	29.472	3	0.2	9,9468 low	Next time	Matt Abelman			
10/19/2017 MA-17560	Matt Abelman	United States Texas	77095 Central	OFF-ST-10000249	Office Supplier	Paper	Easy-staple paper	29.472	3	0.2	9,9468 low	Next time	Matt Abelman			

Remove duplicate records from the dataset

C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	X
11/8/2016 CG-12520	Claire Gute	United States Kentucky	42420 South	FUR-BQ-10001798	Furniture	Bookcases	Bush Somerset Cc	261.96	2	0	41,9136 low	Next time	Claire Gute							
11/8/2016 CG-12520	Claire Gute	United States Kentucky	42420 South	FUR-CR-10000454	Furniture	Chairs	Hon Deluxe Fabrici	711.94	3	0	215,582 low	Next time	Claire Gute							
6/12/2016 DV-13045	Darin Van Huff	United States Kentucky	40036 West	OFF-LA-1000240	Office Supplies	Labels	Self-Adhesive Ad.	14.62	2	0	6,8724 low	Next time	Darin Van Huff							
10/11/2015 SO-20335	Sean O'Donnell	United States Florida	33111 South	OFF-ST-10000777	Furniture	Tables	Bretford CR4500 S	957.5775	5	0.45	-383,031 low	Next time	Sean O'Donnell							
10/11/2015 SO-20335	Sean O'Donnell	United States Florida	33111 South	OFF-ST-1000074	Office Supplier	Storage	Eldon Fold 'N Roll	22.368	2	0.2	2,3164 low	Next time	Sean O'Donnell							
6/9/2014 BH-11729	Brosna Hoffman	United States California	90032 West	TEC-PH-1000223	Technology	Phones	Mitel 5320 IP Phon	907.332	6	0.2	90,7132 low	Next time	Brosna Hoffman							
6/9/2014 BH-11729	Brosna Hoffman	United States California	90032 West	TEC-PH-1000223	Technology	Phones	DXL Angle-View E	18,504	3	0.2	5,782 low	Next time	Brosna Hoffman							
6/9/2014 BH-11729	Brosna Hoffman	United States California	90032 West	TEC-PH-1000223	Technology	Phones	Imation BGB Mini	114.3	5	0	3,436 low	Next time	Brosna Hoffman							
6/9/2014 BH-11729	Brosna Hoffman	United States California	90032 West	PUB-TA-10001339	Furniture	Tables	Chronocraft Recta	1706.184	9	0.2	85,392 low	Next time	Brosna Hoffman							
6/9/2014 BH-11729	Brosna Hoffman	United States California	90032 West	TEC-PH-10002349	Technology	Phones	Cisco SPA 501G IP	213.48	3	0.2	68,356 low	Next time	Brosna Hoffman							
6/9/2014 BH-11729	Brosna Hoffman	United States California	90032 West	TEC-PH-10002349	Technology	Phones	Konftel 250 Conference	911.424	4	0.2	68,356 low	Next time	Brosna Hoffman							
4/15/2016 MH-15070	Irene Maddox	United States Washington	98103 West	OFF-ST-1000356	Office Supplier	Binders	Fellowes PB20 P	407.976	3	0.2	132,592 low	Next time	Irene Maddox							
11/22/2015 HP-14815	Harold Pavlan	United States Texas	76106 Central	OFF-AF-1002311	Office Supplier	Binders	Holmes Replacer	68.81	5	0.8	-123,858 low	Next time	Harold Pavlan							
11/22/2015 HP-14815	Harold Pavlan	United States Texas	76106 Central	OFF-ST-1000075	Office Supplier	Binders	Stores DuraTech F	2.544	3	0.8	-3,816 low	Next time	Harold Pavlan							
11/22/2015 HP-14815	Harold Pavlan	United States Texas	76106 Central	OFF-ST-1000075	Office Supplier	Binders	Stores DuraTech F	1.448	2	0	13,3176 low	Next time	Harold Pavlan							
5/3/2014 AG-10270	Alejandro Grove	United States Utah	84084 West	OFF-ST-1000107	Office Supplier	Storage	Fellowes Super St	55.5	2	0	9,9 low	Next time	Alejandro Grove							
8/27/2014 ZD-21925	Zuschuss Donatelli	United States California	94109 West	OFF-AF-1000391	Office Supplier	Art	Newell 341	8.56	2	0	2,4824 low	Next time	Zuschuss Donatelli							
8/27/2014 ZD-21925	Zuschuss Donatelli	United States California	94109 West	OFF-AF-1000391	Office Supplier	Art	Howard Miller 13-	124.2	3	0.2	16,011 low	Next time	Zuschuss Donatelli							
8/27/2014 ZD-21925	Zuschuss Donatelli	United States California	94109 West	OFF-AF-1000391	Office Supplier	Art	Howard Miller 13-	124.2	3	0.2	17,384 low	Next time	Zuschuss Donatelli							
12/9/2016 KB-16585	Ken Black	United States Nebraska	68025 Central	OFF-AF-1000246	Office Supplier	Art	Newell 318	19.46	7	0	5,0596 low	Next time	Ken Black							
12/9/2016 KB-16585	Ken Black	United States Nebraska	68025 Central	OFF-ST-10000756	Office Supplier	Binders	Acco Six-Outlet Pi	6.658	6	0.7	3,735 low	Next time	Ken Black							
7/16/2016 EH-13945	Eric Hoffmann	United States California	90049 West	OFF-ST-10001539	Furniture	Furnishings	Recessed H	9.618	2	0	240,269 low	Good Performance	Emily Burns							
7/16/2016 EH-13945	Eric Hoffmann	United States California	90049 West	OFF-ST-10001539	Furniture	Furnishings	Recessed H	1044.63	3	0	4,2224 low	Next time	Eric Hoffmann							
7/16/2016 EH-13945	Eric Hoffmann	United States California	90049 West	OFF-ST-10001539	Furniture	Furnishings	Recessed H	1044.63	3	0	4,2224 low	Next time	Eric Hoffmann							
7/17/2013 TB-21520	Tracy Blumstein	United States Pennsylvania	19140 East	FUR-BQ-10001334	Furniture	Furnishings	Wilson Jones Acti	1044.63	3	0	4,2224 low	Next time	Alejandro Grove							
7/17/2013 TB-21520	Tracy Blumstein	United States Pennsylvania	19140 East	FUR-BQ-1000448	Furniture	Furnishings	Wilson Jones Acti	1044.63	3	0	4,2224 low	Next time	Alejandro Grove							
7/17/2013 TB-21520	Tracy Blumstein	United States Pennsylvania	19140 East	OFF-EN-10001509	Office Supplier	Envelopes	Wilson Jones Acti	1044.63	3	0	4,2224 low	Next time	Alejandro Grove							
7/17/2013 TB-21520	Tracy Blumstein	United States Pennsylvania	19140 East	OFF-AF-10002365	Office Supplier	Binders	Wilson Jones Acti	1044.63	3	0	4,2224 low	Next time	Alejandro Grove							
7/17/2013 TB-21520	Tracy Blumstein	United States Pennsylvania	19140 East	OFF-ST-10000756	Office Supplier	Paper	Easy-staple paper	29.472	3	0.2	9,9468 low	Next time	Matt Abelman							
7/17/2013 TB-21520	Tracy Blumstein	United States Pennsylvania	19140 East	OFF-ST-10000107	Office Supplier	Paper	Easy-staple paper	29.472	3	0.2	9,9468 low	Next time	Matt Abelman							
10/19/2017 MA-17560	Matt Abelman	United States Texas	77095 Central	OFF-ST-10000249	Office Supplier	Paper	Easy-staple paper	29.472	3	0.2	9,9468 low	Next time	Matt Abelman							

G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
Customer Name	Country	State	Postal Code Region	Product ID	Category	Sub-Category	Product Name	Sales	Quantity	Discount	Profit	Performance	Performance 2	Customer Name (new)			
Claire Gute	United States Kentucky	42420 South	FUR-BQ-10001798	Furniture	Bookcases	Bush Somerset Cc	261.96	2	0	41,9136 low	Next time	Claire Gute					
Claire Gute	United States Kentucky	42420 South	FUR-CR-10000454	Furniture	Chairs	Hon Deluxe Fabrici	7										

Use Text to Columns to split:

o Email ID OR o Product Code

BEFORE USE OF TEXT TO COLUMNS

I	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
Country	State	Postal Code	Region	Product ID	Category	Sub-Catgeory	Product Name	Sales	Quantity	Discount	Profit	Performance	Performance 2	Customer Name (new)
United States	Kentucky	42420	South	FUR-BO-10001798	Furniture	Bookcases	Bush Somerset Cc	261.96	2	0	41,9136	low	Next time	Claire Gute
United States	Kentucky	42420	South	FUR-CH-10000454	Furniture	Chairs	Hon Deluxe Fabri	731.94	3	0	219,582	low	Next time	Claire Gute
United States	California	90036	West	OFF-LA-10000240	Office Supplies	Labels	Self-Adhesive Ad	14.62	2	0	6,8714	low	Next time	Darrin Van Huff
United States	Florida	33311	South	FUR-TA-10000577	Furniture	Tables	Bretford CR4500 S	957.5775	5	0.45	-383.031	low	Next time	Sean O'Donnell
United States	Florida	33311	South	OFF-ST-10000760	Office Supplies	Storage	Eldon Fold 'N Roll	22.368	2	0.2	2,5164	low	Next time	Sean O'Donnell
United States	California	90032	West	FUR-FU-10001487	Furniture	Furnishings	Eldon Expressions	48.86	7	0	14,1695	low	Next time	Brosina Hoffman
United States	California	90032	West	OFF-AR-10002833	Office Supplies	Art	Newell 322	7.28	4	0	1,9656	low	Next time	Brosina Hoffman
United States	California	90032	West	TEC-PH-10002033	Technology	Phones	Mitel 5320 IP Pho	907.152	6	0.2	90,7152	low	Next time	Brosina Hoffman
United States	California	90032	West	OFF-BI-10003910	Office Supplies	Binders	DXL Angle-View E	18.504	3	0.2	5,7825	low	Next time	Brosina Hoffman
United States	California	90032	West	OFF-AP-10002892	Office Supplies	Appliances	Belkin F5C206VTE	114.9	5	0	34.47	low	Next time	Brosina Hoffman
United States	California	90032	West	FUR-TA-10001539	Furniture	Tables	Chromcraft Recta	1706.184	9	0.2	85,3092	low	Next time	Brosina Hoffman
United States	California	90032	West	OFF-BI-10002365	Office Supplies	Paper	Konfetti 250 Confe	911.424	4	0.2	68,3568	low	Next time	Brosina Hoffman
United States	North Carolina	28027	South	OFF-PA-10002311	Office Supplies	Binders	Xerox 1967	15.552	3	0.2	5,4422	low	Next time	Andrew Allen
United States	Washington	98103	West	OFF-BI-10003659	Office Supplies	Binders	Fellowes PB200 P	407.976	3	0.2	132,5922	low	Next time	Irene Maddox
United States	Texas	76106	Central	OFF-AP-10002311	Office Supplies	Appliances	Holmes Replacer	68.81	5	0.8	-123,858	low	Next time	Harold Pawlan
United States	Texas	76106	Central	OFF-BI-10000758	Office Supplies	Binders	Storex DuraTech F	2.544	3	0.8	-3,816	low	Next time	Harold Pawlan
United States	Wisconsin	53711	Central	OFF-ST-10004186	Office Supplies	Storage	Stur-D-Stor Shelf	665.88	6	0	13,3176	low	Next time	Pete Kriz
United States	Utah	84048	West	OFF-ST-10000107	Office Supplies	Storage	Fellowes Super St	55.5	2	0	9.99	low	Next time	Alejandro Grove
United States	California	94109	West	OFF-AR-10003056	Office Supplies	Art	Newell 341	8.56	2	0	2,4824	low	Next time	Zuschuss Donatelli
United States	California	94109	West	TEC-PH-10001949	Technology	Phones	Cisco SPA 501G IP	213.48	3	0.2	16,011	low	Next time	Zuschuss Donatelli
United States	Nebraska	68025	Central	OFF-AR-1000246	Office Supplies	Art	Wilson Jones Han	22.72	4	0.2	7,384	low	Next time	Zuschuss Donatelli
United States	Nebraska	68025	Central	OFF-AP-10001492	Office Supplies	Appliances	Acco Six-Outlet Pi	60.34	7	0	15,6884	low	Next time	Ken Black
United States	Pennsylvania	19140	East	FUR-CH-10002774	Furniture	Chairs	Global Deluxe Sta	71.372	2	0.3	-1,0196	low	Next time	Sandra Flanagan
United States	Utah	84057	West	FUR-TA-10000577	Furniture	Tables	Bretford CR4500 S	1044.63	3	0	240,2649	low	Good Performance	Emily Burns
United States	California	90049	West	OFF-BI-10001634	Office Supplies	Binders	Wilson Jones Acti	11.648	2	0.2	4,2224	low	Next time	Eric Hoffmann
United States	California	90049	West	TEC-AC-10003027	Technology	Accessories	Imation 8GB Mini	90.57	3	0	11,7741	low	Next time	Eric Hoffmann
United States	Pennsylvania	19140	East	FUR-BO-10004834	Furniture	Bookcases	Riverside Palais R	3083.43	7	0.5	-1665.05	high	Next time	Tracy Blumstein
United States	Pennsylvania	19140	East	OFF-BI-10000474	Office Supplies	Binders	Avery Recycled Fl	9.618	2	0.7	-7,0532	low	Next time	Tracy Blumstein
United States	Pennsylvania	19140	East	OFF-FU-10004848	Furniture	Furnishings	Howard Miller 13-	124.2	3	0.2	15,525	low	Next time	Tracy Blumstein
United States	Pennsylvania	19140	East	OFF-EN-10001509	Office Supplies	Envelopes	Poly String Tie En	3.264	2	0.2	1,1016	low	Next time	Tracy Blumstein
United States	Pennsylvania	19140	East	OFF-AR-10004042	Office Supplies	Art	BOSTON Model 11	86.304	6	0.2	9,7092	low	Next time	Tracy Blumstein
United States	Pennsylvania	19140	East	OFF-BI-10001525	Office Supplies	Binders	Acco Pressboard C	6.858	6	0.7	-5,715	low	Next time	Tracy Blumstein
United States	Pennsylvania	19140	East	OFF-AR-10001683	Office Supplies	Art	Lumber Crayons	15.76	2	0.2	3,546	low	Next time	Tracy Blumstein
United States	Texas	77095	Central	OFF-PA-10000249	Office Supplies	Paper	Easy-staple paper	29.472	3	0.2	9,9468	low	Next time	Matt Abelma

AFTER USE OF TEXT TO COLUMNS

I	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
Country	State	Postal Code	Region	Product ID	Category	Sub-Catgeory	Product Name	Sales	Quantity	Discount	Profit	Performance	Performance 2	Customer Name (new)	Product ID
United States	Kentucky	42420	South	FUR-BO-10001798	Furniture	Bookcases	Bush Somerset Cc	261.96	2	0	41,9136	low	Next time	Claire Gute	FUR-BO-10001798
United States	Kentucky	42420	South	FUR-CH-10000454	Furniture	Chairs	Hon Deluxe Fabri	731.94	3	0	219,582	low	Next time	Claire Gute	FUR-CH-10000454
United States	California	90036	West	OFF-LA-10000240	Office Supplies	Labels	Self-Adhesive Ad	14.62	2	0	6,8714	low	Next time	Darrin Van Huff	OFF-LA-10000240
United States	Florida	33311	South	FUR-TA-10000577	Furniture	Tables	Bretford CR4500 S	957.5775	5	0.45	-383.031	low	Next time	Sean O'Donnell	FUR-TA-10000577
United States	Florida	33311	South	OFF-ST-10000760	Office Supplies	Storage	Eldon Fold 'N Roll	22.368	2	0.2	2,5164	low	Next time	Sean O'Donnell	OFF-ST-10000760
United States	California	90032	West	OFF-FU-10001487	Furniture	Furnishings	Eldon Expressions	48.86	7	0	14,1694	low	Next time	Brosina Hoffman	FUR-FU-10001487
United States	California	90032	West	OFF-AR-10002833	Office Supplies	Art	Newell 322	7.28	4	0	1,9656	low	Next time	Brosina Hoffman	OFF-AR-10002833
United States	California	90032	West	TEC-PH-10002275	Technology	Phones	Mitel 5320 IP Pho	907.152	6	0.2	90,7152	low	Next time	Brosina Hoffman	TEC-PH-10002275
United States	California	90032	West	OFF-BI-10003910	Office Supplies	Binders	DXL Angle-View E	18.504	3	0.2	5,2025	low	Next time	Brosina Hoffman	OFF-BI-10003910
United States	California	90032	West	OFF-AP-10000292	Office Supplies	Appliances	Belkin F5C206VTE	114.9	5	0	34.47	low	Next time	Brosina Hoffman	OFF-AP-10000292
United States	California	90032	West	FUR-TA-10001539	Furniture	Tables	Chromcraft Recta	1705.184	9	0.2	85,2092	low	Next time	Brosina Hoffman	FUR-TA-10001539
United States	California	90032	West	TEC-PH-10002033	Technology	Phones	Konfetti 250 Confe	911.424	4	0.2	68,3568	low	Next time	Brosina Hoffman	TEC-PH-10002033
United States	North Carolina	28027	South	OFF-PA-10002365	Office Supplies	Paper	Xerox 1967	15.552	3	0.2	5,4422	low	Next time	Andrew Allen	OFF-PA-10002365
United States	Texas	76106	Central	OFF-AP-10002311	Office Supplies	Appliances	Holmes Replacer	68.81	5	0.8	-123,5922	low	Next time	Irene Maddox	OFF-BI-10003656
United States	Wisconsin	53711	Central	OFF-ST-10004186	Office Supplies	Storage	Stur-D-Stor Shelf	665.88	6	0	13,3176	low	Next time	Pete Kriz	OFF-ST-10004186
United States	Utah	84048	West	OFF-ST-10000107	Office Supplies	Storage	Fellowes Super St	55.5	2	0	9.99	low	Next time	Alejandro Grove	OFF-ST-10000107
United States	California	94109	West	OFF-AR-10003056	Office Supplies	Art	Newell 341	8.56	2	0	2,4824	low	Next time	Zuschuss Donatelli	OFF-AR-10003056
United States	California	94109	West	TEC-PH-10001949	Technology	Phones	Cisco SPA 501G IP	213.48	3	0.2	16,011	low	Next time	Zuschuss Donatelli	TEC-PH-10001949
United States	California	94109	West	OFF-BI-10002215	Office Supplies	Binders	Wilson Jones Han	22.72	4	0.2	7,384	low	Next time	Zuschuss Donatelli	OFF-BI-10002215
United States	Nebraska	68025	Central	OFF-AR-10000246	Office Supplies	Art	Newell 318	15.46	7	0	5,0596	low	Next time	Ken Black	OFF-AR-10000246
United States	Nebraska	68025	Central	OFF-AP-10001492	Office Supplies	Appliances	Acco Six-Outlet Pi	60.34	7	0	15,6884	low	Next time	Ken Black	OFF-AP-10001492
United States	Pennsylvania	19140	East	FUR-CH-10002774	Furniture	Chairs	Global Deluxe Sta	71.372	2	0.3	-1,0196	low	Next time	Sandra Flanagan	FUR-CH-10002774
United States	Utah	84057	West	FUR-TA-10000577	Furniture	Tables	Bretford CR4500 S	1044.63	3	0	240,2649	low	Good Performance	Emily Burns	FUR-TA-10000577
United States	California	90049	West	OFF-BI-10001634	Office Supplies	Binders	Wilson Jones Acti	11.648	2	0.2	4,2224	low	Next time	Eric Hoffmann	OFF-BI-10001634
United States	California	90049	West	TEC-AC-10003027	Technology	Accessories	Imation 8GB Mini	90.57	3	0	11,7741	low	Next time	Eric Hoffmann	TEC-AC-10003027
United States	Pennsylvania	19140	East	FUR-BO-10004834	Furniture	Bookcases	Riverside Palais R	3083.43	7	0.5	-1665.05	high	Next time	Tracy Blumstein	FUR-BO-10004834
United States	Pennsylvania	19140	East	OFF-BI-10000474	Office Supplies	Binders	Avery Recycled Fl	9.618	2	0.7	-7,0532	low	Next time	Tracy Blumstein	OFF-BI-10000474
United States	Pennsylvania	19140	East	FUR-FU-10004848	Furniture	Furnishings	Howard Miller 13-	124.2	3	0.2	15,525	low	Next time	Tracy Blumstein	FUR-FU-10004848
United States	Pennsylvania	19140	East	OFF-EN-10001509	Office Supplies	Envelopes	Poly String Tie En	3.264	2	0.2	1,1016	low	Next time	Tracy Blumstein	OFF-EN-10001509
United States	Pennsylvania	19140	East	OFF-AR-10000402	Office Supplies	Art	BOSTON Model 11	86.304	6	0.2	9,7092	low	Next time	Tracy Blumstein	OFF-AR-10000402
United States	Pennsylvania	19140	East	OFF-BI-10001525	Office Supplies	Binders	Acco Pressboard C	6.858	6	0.7	-5,715	low	Next time	Tracy Blumstein	OFF-BI-10001525
United States	Pennsylvania	19140	East	OFF-AR-10001683	Office Supplies	Art	Lumber Crayons	15.76	2	0.2	3,546	low	Next time	Tracy Blumstein	OFF-AR-10001683
United States	Texas	77095	Central	OFF-PA-10000249	Office Supplies	Paper	Easy-staple paper	29.472	3	0.2	9,9468	low	Next time	Matt Abelma	OFF-PA-10000249

TASK 4: Lookup & Date Functions

11. Use VLOOKUP / XLOOKUP to fetch:

- Category based on Product ID OR
- Region based on Customer ID

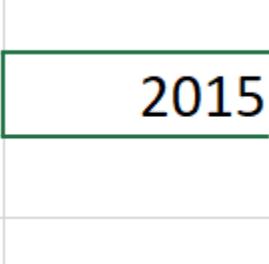
```
=VLOOKUP(N:N,N:O,2,FALSE)
```

USED VLOOKUP BECAUSE

Excel lookup functions for finding and retrieving data from tables. Supports every excel version on the other side XLOOKUP Supports only 2021 excel version.

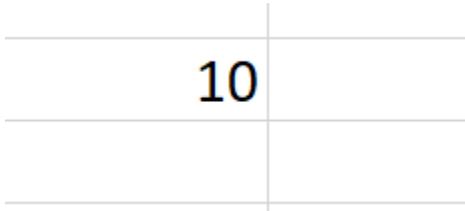
Extract: • Year using YEAR() • Month using MONTH() or TEXT()

```
=YEAR(C9377)
```



2015

```
fx =MONTH(C1500)
```



10

TASK 5: Pivot Tables & Charts

Create a Pivot Table showing:

- Total Sales by Region

Regions	Sales (in Rupees)
Central	501239.8908
East	678499.868
South	391721.905
West	725457.8245
Grand Total	2296919.488

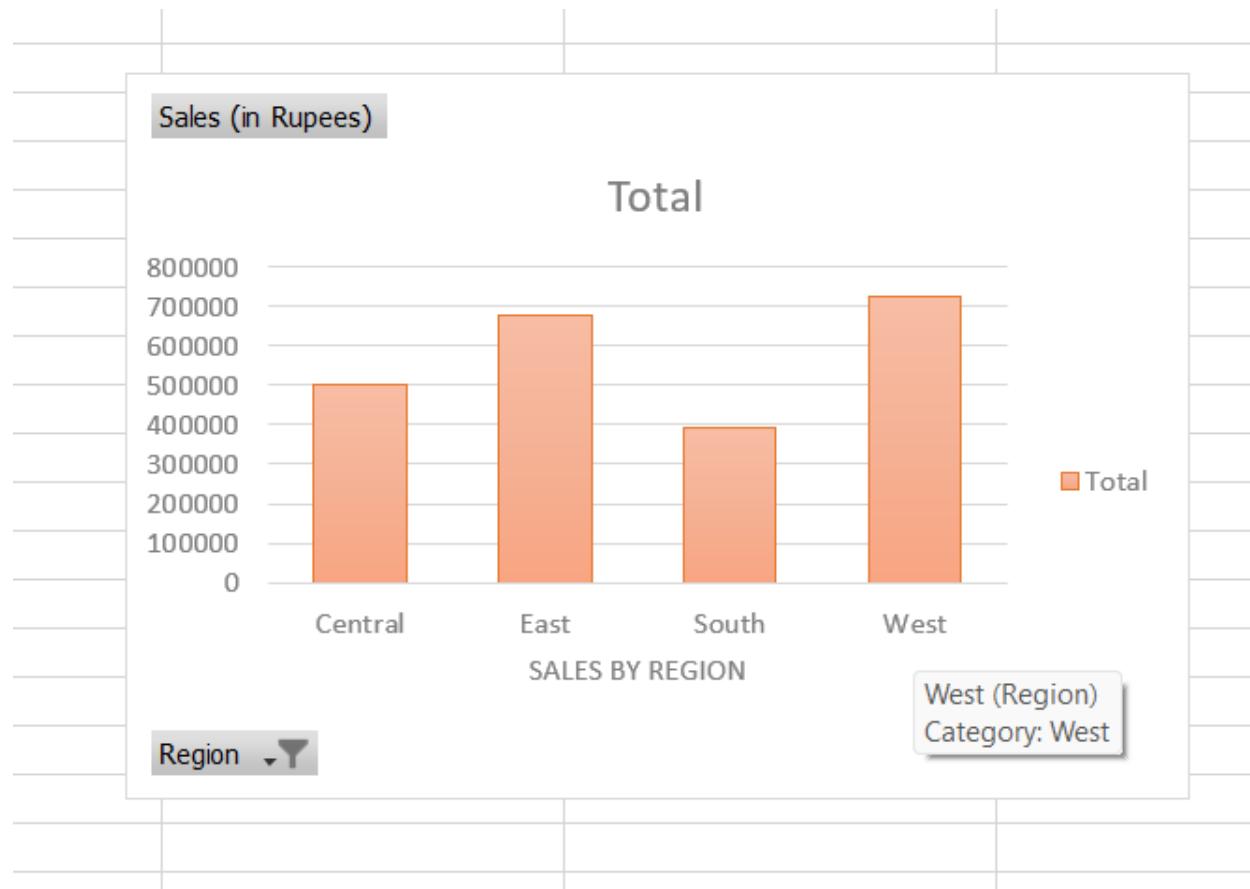
Create a Pivot Table showing:

- Profit by Category

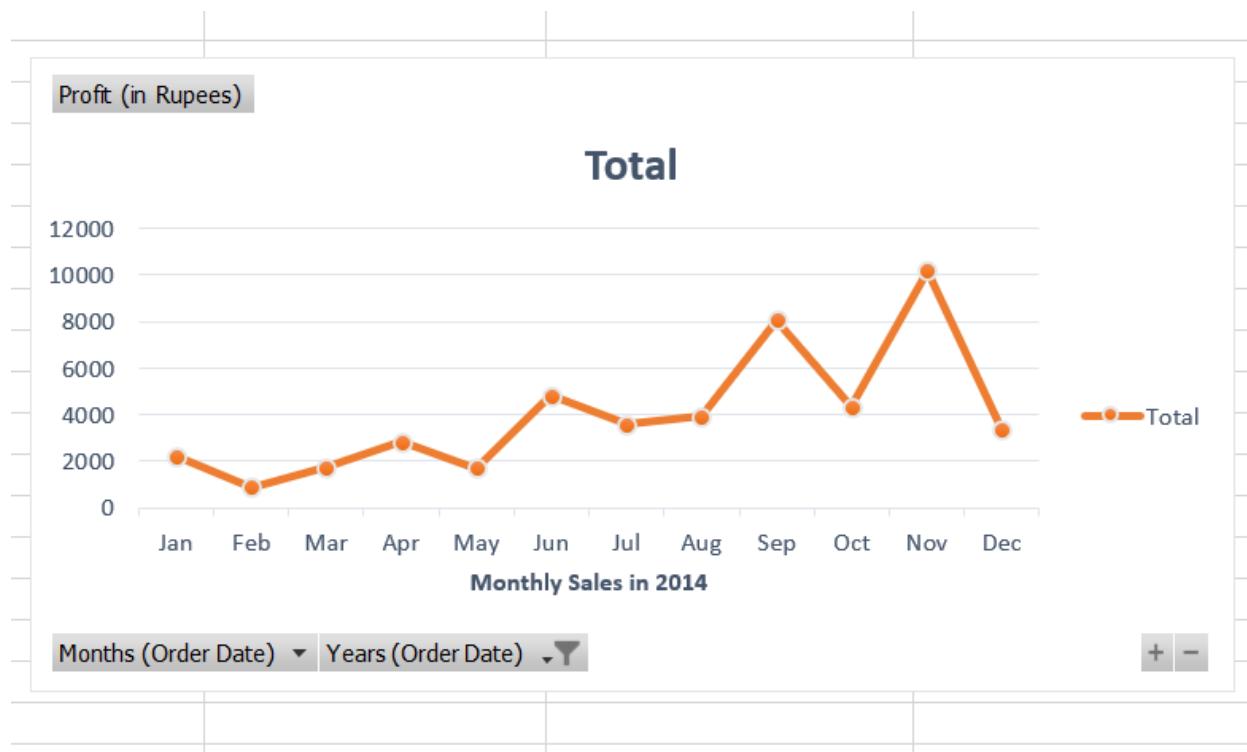
Category	Profit (in Rupees)
Furniture	18463.3316
Office Supplies	122490.8008
Technology	145454.9481
Grand Total	286409.0805

Create Pivot Charts for:

- Sales by Region (Bar/Column Chart)



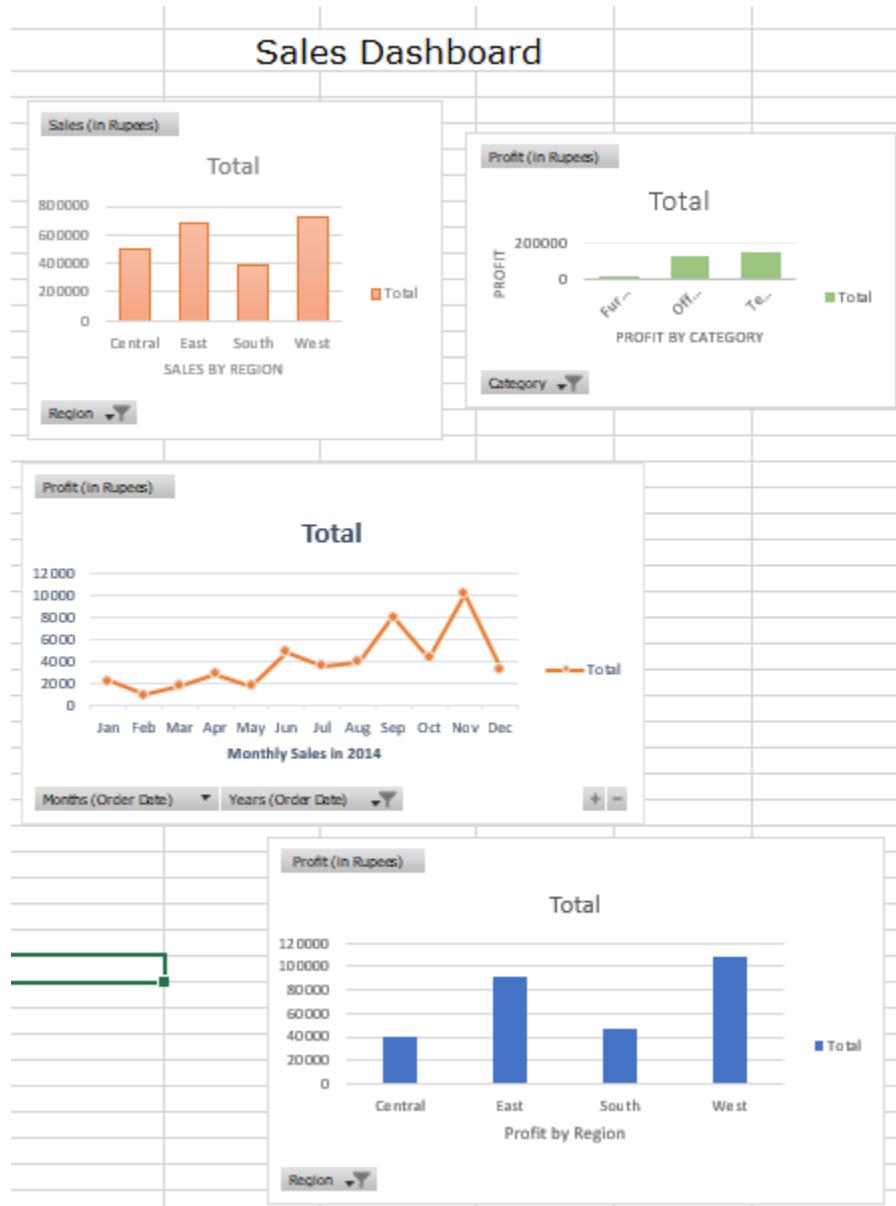
- Monthly Sales Trend (Line Chart)



TASK 6: Dashboard Creation

Create ONE Dashboard Sheet containing:

- At least 3 Pivot Charts
- At least 2 Slicers (Region, Category, or Year)
- Proper titles and clean layout



TASK 7: Conceptual Questions

Why is Excel still widely used in Data Analytics?

Excel is still widely used in data analytics because it offers a simple yet powerful environment for handling, analyzing, and visualizing data. It allows users to perform data cleaning, calculations, and exploratory analysis using formulas, charts, and Pivot Tables without requiring programming expertise. Excel's compatibility with various data sources and analytics tools, along with its widespread acceptance across industries, makes it a reliable and efficient tool for both beginners and professionals.

What is the difference between COUNT() and COUNTA()?

The COUNT() function counts only cells that contain numeric values, including numbers and dates stored in numeric format.

The COUNTA() function, on the other hand, counts all non-empty cells, regardless of whether they contain text, numbers, logical values, or errors.

Thus, COUNT() is used when analyzing numeric data, while COUNTA() is useful for measuring data completeness.

What is a Pivot Table and why is it important?

A Pivot Table is an Excel feature used to summarize and analyze large datasets by grouping and aggregating data across different categories. It enables users to calculate totals, averages, and other metrics dynamically without modifying the original dataset.

Pivot Tables are important because they simplify complex data, support quick analysis, and help identify trends and patterns, making them an essential tool in data-driven decision-making.

What are slicers and how do they help in dashboards?

Slicers are visual filtering tools that allow users to interactively filter data displayed in Pivot Tables and dashboards. They provide a clear and intuitive way to control which data is shown by using clickable buttons.

Slicers improve dashboards by enhancing interactivity, improving user experience, and allowing users to analyze data from different perspectives without technical complexity.

Why is data cleaning important before analysis?

Data cleaning is important because datasets often contain missing values, duplicates, inconsistencies, and errors that can negatively impact analysis results. Cleaning the data ensures accuracy, reliability, and consistency, which are essential for meaningful analysis.

Without proper data cleaning, conclusions drawn from the analysis may be inaccurate or misleading, leading to poor decision-making. Therefore, data cleaning is a critical step in the data analytics process.