







# CUSTOMER DATA ANALYSIS

- AN SQL PROJECT



# 1. FETCH ALL THE RECORDS FROM CUSTOMER TABLE.

```
select * from customers;
```

Result Grid     Filter Rows: <input type="text"/>   Export:    Wrap Cell Content: 								
	orderid	orderdate	shipdate	shipmode	customerid	customername	segment	country
▶	CA-2016-152156	2016-11-08	2016-11-11	Second Class	CG-12520	Claire Gute	Consumer	United States
	CA-2016-152156	2016-11-08	2016-11-11	Second Class	CG-12520	Claire Gute	Consumer	United States
	CA-2016-138688	2016-06-12	2016-06-16	Second Class	DV-13045	Darrin Van Huff	Corporate	United States
	US-2015-108966	2015-10-11	2015-10-18	Standard Class	SO-20335	Sean O'Donnell	Consumer	United States
	US-2015-108966	2015-10-11	2015-10-18	Standard Class	SO-20335	Sean O'Donnell	Consumer	United States
	CA-2014-115812	2014-06-09	2014-06-14	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States

## 2. FETCH “ORDER ID, ORDER DATE, COUNTRY, REGION” FROM CUSTOMERS.

Select order id, order date, country, region from customers;

Result Grid     Filter Rows: <input type="text"/>   Export				
	orderid	orderdate	country	region
▶	CA-2016-152156	2016-11-08	United States	South
	CA-2016-152156	2016-11-08	United States	South
	CA-2016-138688	2016-06-12	United States	West
	US-2015-108966	2015-10-11	United States	South
	US-2015-108966	2015-10-11	United States	South
	CA-2014-115812	2014-06-09	United States	West
	CA-2014-115812	2014-06-09	United States	West

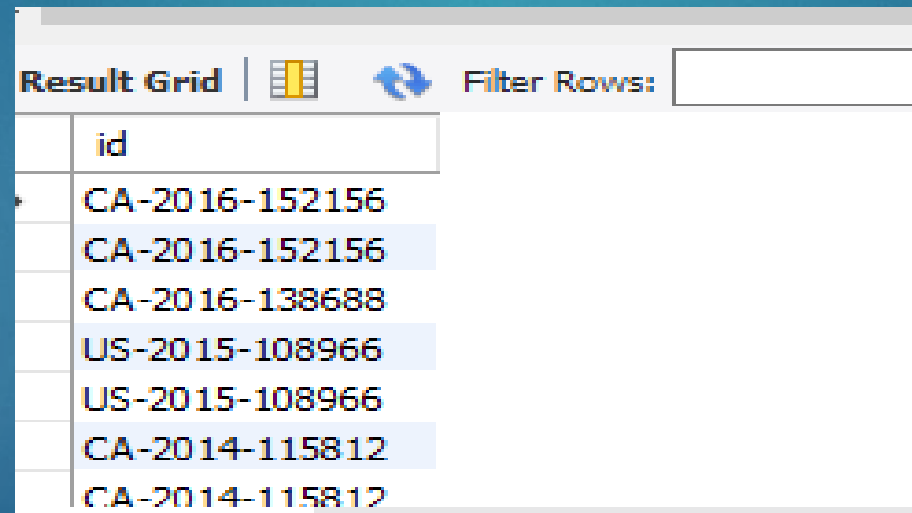
### 3. Fetch unique categories from customers table.

```
select distinct(category) from customers ;
```

Result Grid		Filter Rows:
	category	
▶	Furniture	
	Office Supplies	
	Technology	

## 4. CHANGE ORDER ID AS ID

Select order id as id from customers ;




The screenshot shows a 'Result Grid' window with a toolbar at the top containing a grid icon, a refresh icon, and a 'Filter Rows:' input field. Below the toolbar is a table with one column labeled 'id'. The table contains eight rows of data, with alternating light blue and white background colors for each row.

id
CA-2016-152156
CA-2016-152156
CA-2016-138688
US-2015-108966
US-2015-108966
CA-2014-115812
CA-2014-115812





## 5. Fetch order details related to technology.

Select \* from customers where category = “technology”;

Cell Content: 						
region	productid	category	subcategory	productname	sales	quant
West	TEC-PH-10002275	Technology	Phones	Mitel 5320 IP Phone VoIP phone	907.152	6
West	TEC-PH-10002033	Technology	Phones	Konftel 250 ConferenceÃ&AphoneÃ&A - Charcoa...	911.424	4
West	TEC-PH-10001949	Technology	Phones	Cisco SPA 501G IP Phone	213.48	3
West	TEC-AC-10003027	Technology	Accessories	ImationÃ&A 8GB Mini TravelDrive USB 2.0Ã&A Fla...	90.57	3
Central	TEC-PH-10004977	Technology	Phones	GE 30524EE4	1097.544	7
Central	TEC-PH-10000486	Technology	Phones	Plantronics HL 10 Handset I lter	371.168	4





## 6. FETCH ORDER DETAILS WHERE QUANTITY IS GREATER THAN 10

Select \* from customers where quantity > 10;

Result Grid   Filter Rows: <input type="text"/>   Export:    Wrap Cell Content: 														
	orderid	orderdate	shipdate	shipmode	customerid	customername	segment	country	city	state	postalcode	region	productid	category
▶	CA-2014-115259	2014-08-25	2014-08-27	Second Class	RC-19960	Ryan Crowe	Consumer	United States	Columbus	Ohio	43229	East	OFF-FA-10000621	Office Supplies
	CA-2016-145583	2016-10-13	2016-10-19	Standard Class	LC-16885	Lena Creighton	Consumer	United States	Roseville	California	95661	West	FUR-FU-10001706	Furniture

## 7. FETCH ORDER DETAILS WHERE SALES IS LESS THAN 5000

```
select * from customers where sales < 5000;
```





Result Grid   Filter Rows: <input type="text"/> Export:  Wrap Cell Content: 														
	orderid	orderdate	shipdate	shipmode	customerid	customername	segment	country	city	state	postalcode	region	productid	cat
▶	CA-2016-152156	2016-11-08	2016-11-11	Second Class	CG-12520	Claire Gute	Consumer	United States	Henderson	Kentucky	42420	South	FUR-BO-10001798	Furr
	CA-2016-152156	2016-11-08	2016-11-11	Second Class	CG-12520	Claire Gute	Consumer	United States	Henderson	Kentucky	42420	South	FUR-CH-10000454	Furr
	CA-2016-138688	2016-06-12	2016-06-16	Second Class	DV-13045	Darrin Van Huff	Corporate	United States	Los Angeles	California	90036	West	OFF-LA-10000240	Offi
	US-2015-108966	2015-10-11	2015-10-18	Standard Class	SO-20335	Sean O'Donnell	Consumer	United States	Fort Lauderdale	Florida	33311	South	FUR-TA-10000577	Furr
	US-2015-108966	2015-10-11	2015-10-18	Standard Class	SO-20335	Sean O'Donnell	Consumer	United States	Fort Lauderdale	Florida	33311	South	OFF-ST-10000760	Offi
	CA-2014-115812	2014-06-09	2014-06-14	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States	Los Angeles	California	90032	West	FUR-FU-10001487	Furr





## 9. FETCH ALL RECORDS FROM CUSTOMERS WHERE QUANTITY IS GREATER THAN 5, REGION IS EAST AND SUBCATEGORY IS PHONES


```
select * from customers  
where quantity > 5 and region = "east" and subcategory = "phones";
```


Result Grid   Filter Rows: <input type="text"/> Export:  Wrap Cell Content: 												
	country	city	state	postalcode	region	productid	category	subcategory	productname	sales	quantity	discount
▶	United States	Wilmington	Delaware	19805	East	TEC-PH-10003875	Technology	Phones	KLD Oscar II Style Snap-on Ultra Thin Side Flip S...	68.04	7	0

## 10. FETCH ALL RECORDS RELATED TO TECHNOLOGY AND OFFICE SUPPLIES

```
select * from customers
where category = 'Technology' or category = 'Office Supplies' ;
```

Filter Rows:

Export: 

Wrap Cell Content: 

state	postalcode	region	productid	category	subcategory	productname
California	90036	West	OFF-LA-10000240	Office Supplies	Labels	Self-Adhesive Address Labels
California	33311	South	OFF-ST-10000760	Office Supplies	Storage	Eldon Fold 'N Roll Cart System
California	90032	West	OFF-AR-10002833	Office Supplies	Art	Newell 322
California	90032	West	TEC-PH-10002275	Technology	Phones	Mitel 5320 IP Phone VoIP ph
California	90032	West	OFF-BI-10003910	Office Supplies	Binders	DXL Angle-View Binders with
California	90032	West	OFF-AP-10002892	Office Supplies	Appliances	Belkin F5C206VTEL 6 Outlet
California	90032	West	TEC-PH-10002033	Technology	Phones	Konftel 250 Conference



## 11. Fetch all records related to phones, paper and art

```
select * from customers
where subcategory in ('phones','paper','art') ;
```

city	state	postalcode	region	productid	category	subcategory	productname
emont	Nebraska	68025	Central	OFF-AR-10000246	Office Supplies	Art	Newell 318
Philadelphia	Pennsylvania	19140	East	OFF-AR-10004042	Office Supplies	Art	BOSTON Model 1800 Electric Pencil Sharpeners,...
States	Pennsylvania	19140	East	OFF-AR-10001683	Office Supplies	Art	Lumber Crayons
uston	Texas	77095	Central	OFF-PA-10000249	Office Supplies	Paper	Easy-staple paper
hardson	Texas	75080	Central	TEC-PH-10004977	Technology	Phones	GE 30524EE4
uston	Texas	77041	Central	TEC-PH-10000486	Technology	Phones	Plantronics HL10 Handset Lifter
perville	Illinois	60540	Central	TEC-PH-10004093	Technology	Phones	Panasonic Kx-TS550




## 12. FETCH ALL THE RECORDS EXCEPT RECORDS RELATED TO CENTRAL REGION

Select \* from customers  
where not region = 'Central' ;

Export:  Wrap Cell Content: 						
city	state	postalcode	region	productid	category	subcate
Anderson	Kentucky	42420	South	FUR-BO-10001798	Furniture	Bookcas
Anderson	Kentucky	42420	South	FUR-CH-10000454	Furniture	Chairs
Los Angeles	California	90036	West	OFF-LA-10000240	Office Supplies	Labels
Port Lauderdale	Florida	33311	South	FUR-TA-10000577	Furniture	Tables
Port Lauderdale	Florida	33311	South	OFF-ST-10000760	Office Supplies	Storage
Los Angeles	California	90032	West	FUR-FU-10001487	Furniture	Furnishi
Los Angeles	California	90032	West	OFF-AR-10002833	Office Supplies	Art

## 13. FETCH ALL THE RECORDS RELATED TO TECHNOLOGY AND ORDER BY ORDER DATE IN ASCENDING ORDER

```
select * from customers where category = 'Technology'  
order by order date asc ;
```

Result Grid    Filter Rows: <input type="text"/>   Export:  Wrap Cell Content: 													
	orderdate	shipdate	shipmode	customerid	customername	segment	country	city	state	postalcode	region	productid	category
▶	2014-06-09	2014-06-14	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States	Los Angeles	California	90032	West	TEC-PH-10002275	Technology
	2014-06-09	2014-06-14	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States	Los Angeles	California	90032	West	TEC-PH-10002033	Technology
	2014-08-27	2014-09-01	Second Class	ZD-21925	Zuschuss Donatelli	Consumer	United States	San Francisco	California	94109	West	TEC-PH-10001949	Technology
	2014-12-05	2014-12-10	Standard Class	BS-11590	Brendan Sweed	Corporate	United States	Gilbert	Arizona	85234	West	TEC-PH-10002726	Technology
	2015-10-15	2015-10-20	Standard Class	PA-19060	Pete Armstrong	Home Office	United States	Orland Park	Illinois	60462	Central	TEC-AC-10000844	Technology
	2015-11-13	2015-11-17	Standard Class	LC-16870	Lena Cacioppo	Consumer	United States	Aurora	Colorado	80013	West	TEC-AC-10001552	Technology
	2015-11-24	2015-11-30	Standard Class	KM-16720	Kunst Miller	Consumer	United States	Los Angeles	California	90004	West	TEC-AC-10004633	Technology



100

orderdate	shipdate	shipmode	customerid	customername	segment	country	city	state
2017-12-09	2017-12-11	First Class	KB-16600	Ken Brennan	Corporate	United States	Houston	Texas
2017-12-09	2017-12-11	First Class	KB-16600	Ken Brennan	Corporate	United States	Houston	Texas
2017-10-19	2017-10-23	Second Class	MA-17560	Matt Abelman	Home Office	United States	Houston	Texas
2016-12-08	2016-12-10	First Class	GH-14485	Gene Hale	Corporate	United States	Richardson	Texas
2016-12-08	2016-12-10	First Class	GH-14485	Gene Hale	Corporate	United States	Richardson	Texas
2016-04-05	2016-04-10	Second Class	GM-14455	Gary Mitchum	Home Office	United States	Houston	Texas
2015-12-27	2015-12-31	Standard Class	SN-20710	Steve Nguyen	Home Office	United States	Houston	Texas

## 15. CHECK IS THERE ANY NULL VALUES IN CATEGORY COLUMN

```
select * from customers  
where category is null ;
```

Result Grid

Filter Rows:

Export:

Wrap Cell Content:






orderid	orderdate	shipdate	shipmode	customerid	customername	segment	country	city	state	postalcode	region	productid	category
---------	-----------	----------	----------	------------	--------------	---------	---------	------	-------	------------	--------	-----------	----------

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## 16. FETCH TOP 5 ORDERS WITH HIGHEST SALES IN TECHNOLOGY

```
select * from customers
where category = 'Technology'
order by sales desc limit 5;
```

Result Grid     Filter Rows: <input type="text"/>   Export:    Wrap Cell Content:    Fetch rows: 										
	untry	city	state	postalcode	region	productid	category	subcategory	productname	sales
▶	ted States	Richardson	Texas	75080	Central	TEC-PH-10004977	Technology	Phones	GE 30524EE4	1097.544
	ted States	New York City	New York	10024	East	TEC-PH-10002447	Technology	Phones	AT&T CL83451 4-Handset Telephone	1029.95
	ted States	Los Angeles	California	90032	West	TEC-PH-10002033	Technology	Phones	Konftel 250 ConferenceÃÂ phoneÃÂ - Charcoa...	911.424
	ted States	Los Angeles	California	90032	West	TEC-PH-10002275	Technology	Phones	Mitel 5320 IP Phone VoIP phone	907.152
	ted States	Houston	Texas	77041	Central	TEC-PH-10000486	Technology	Phones	Plantronics HL10 Handset Lifter	371.168

## 17. FETCH ALL RECORDS RELATED TO PAPER ,PHONES AND ART SUBCATEGORY

```
select * from customers
where subcategory in ('paper', 'phones', 'art');
```

Export:  Wrap Cell Content: 						
state	postalcode	region	productid	category	subcategory	productname
California	90032	West	OFF-AR-10002833	Office Supplies	Art	Newell 322
California	90032	West	TEC-PH-10002275	Technology	Phones	Mitel 5320 IP Phone VoIP phone
California	90032	West	TEC-PH-10002033	Technology	Phones	Konftel 250 ConferenceÃÂ phoneÃÂ - Charcoa...
North Carolina	28027	South	OFF-PA-10002365	Office Supplies	Paper	Xerox 1967
California	94109	West	OFF-AR-10003056	Office Supplies	Art	Newell 341
California	94109	West	TEC-PH-10001949	Technology	Phones	Cisco SPA 501G IP Phone
Nebraska	68025	Central	OFF-AR-10000246	Office Supplies	Art	Newell 318



## 18. FETCH ALL RECORDS BETWEEN 04-01-2015 AND 29-12-2015

Select \* from customers  
where order date between '2015-01-04' and '2015-12-29';

Result Grid						
		Filter Rows:		Export:	Wrap Cell Content:	
	orderid	orderdate	shipdate	shipmode	customerid	customernam
▶	US-2015-108966	2015-10-11	2015-10-18	Standard Class	SO-20335	Sean O'Donn
	US-2015-108966	2015-10-11	2015-10-18	Standard Class	SO-20335	Sean O'Donn
	US-2015-118983	2015-11-22	2015-11-26	Standard Class	HP-14815	Harold Pawla
	US-2015-118983	2015-11-22	2015-11-26	Standard Class	HP-14815	Harold Pawla
	CA-2015-106320	2015-09-25	2015-09-30	Standard Class	EB-13870	Emily Burns
	US-2015-150630	2015-09-17	2015-09-21	Standard Class	TB-21520	Tracy Blumst
	US-2015-150630	2015-09-17	2015-09-21	Standard Class	TB-21520	Tracy Blumst

## 19. FETCH ALL RECORDS RELATED TO WEST REGION

```
select * from customers  
where region like 'w%';
```

Export:  Wrap Cell Content: 						
	city	state	postalcode	region	productid	category
s	Los Angeles	California	90032	West	FUR-TA-10001539	Furniture
s	Los Angeles	California	90032	West	TEC-PH-10002033	Technology
s	Seattle	Washington	98103	West	OFF-BI-10003656	Office Supplies
s	West Jordan	Utah	84084	West	OFF-ST-10000107	Office Supplies
s	San Francisco	California	94109	West	OFF-AR-10003056	Office Supplies
s	San Francisco	California	94109	West	TEC-PH-10001949	Technology
s	San Francisco	California	94109	West	OFF-BI-10002215	Office Supplies

## 20. FIND NUMBER OF ORDERS RELATED TO TECHNOLOGY

```
select count(*) from customers  
where category = 'technology';
```

Result Grid		Filter Rows:	Export:	Wrap Cell Content
	count(*)			
▶	23			



## 21. FIND COUNT OF UNIQUE CATEGORIES

```
select count(distinct category) from customers;
```

Result Grid		Filter Rows:
	count(distinct category)	
▶	3	

## 22. FIND THE AVERAGE SALES

```
select avg(sales) from customers;
```

Result Grid				Filter Rows:
	avg(sales)			
▶	192.511399270073			



## 23. FIND SUM OF SALES IN TEXAS

Select sum(sales) from customers  
Where state = 'Texas';

Result Grid		Filter Rows:
	sum(sales)	
▶	3424.9572000000003	



## 24. FIND LEAST SALES IN TECHNOLOGY

```
select min(sales) from customers  
where category = 'Technology' ;
```

Result Grid		Filter Rows:
	min(sales)	
▶	13.98	

## 25. FIND HIGHEST SALES IN OFFICE SUPPLIES

Select max(sales) from customers  
Where category = 'office supplies' ;

Result Grid		Filter Rows:
	max(sales)	
▶	1113.024	

## 26. WRITE AN SQL QUERY TO FIND NUMBER OF ORDERS IN EACH CATEGORY

```
Select category, count (*) as total_orders  
From customers  
group by category;
```

Result Grid			Filter Rows:
	category	total_orders	
▶	Furniture	32	
	Office Supplies	82	
	Technology	23	

## 27. FIND TOTAL SALES OVER DIFFERENT REGION

select region, sum(sales) from customers  
group by region ;

Result Grid			Filter Rows:
	region	sum(sales)	
▶	South	4153.6995000000001	
	West	9353.968	
	Central	6715.75419999999985	
	East	6150.6400000000001	

## 28. FIND SUBCATEGORIES WHICH HAVE GOT ORDERS GREATER THAN 10

```
select subcategory, count(*) as total_order from customers
group by subcategory
having total_order > 1000 ;
```

Result Grid			Filter Rows:
	subcategory	total_order	
▶	Storage	14	
	Furnishings	14	
	Art	12	
	Phones	13	
	Binders	22	
	Paper	15	



**Thank you**