

## SQL Queries and Outputs

```
CREATE INDEX RowID_index on cleaned_sales_data(row_id);
```

```
CREATE INDEX ProductID_index on cleaned_sales_data(product_id);
```

```
CREATE INDEX ProductName_index on cleaned_sales_data(product_name);
```

```
CREATE VIEW AvgSalesProfitCost as
```

```
SELECT avg(sales) as avg_sales, avg(profit) as avg_profit, avg(cost) as avg_cost FROM  
cleaned_sales_data;
```

```
CREATE VIEW TotalSalesProfitCost as
```

```
SELECT sum(sales) as total_sales, sum(profit) as total_profit, sum(cost) as total_cost FROM  
cleaned_sales_data;
```

```
CREATE VIEW RegionCount as
```

```
SELECT region, count(*) as count FROM cleaned_sales_data GROUP by region ORDER by count desc;
```

```
SELECT * FROM AvgSalesProfitCost;
```

	avg_sales	avg_profit	avg_cost
1	6505.82710637333	0.0385228317499236	501.568657676984

```
Execution finished without errors.  
Result: 1 rows returned in 17ms
```

```
SELECT * FROM TotalSalesProfitCost;
```

	total_sales	total_profit	total_cost
1	63685541.5442885	377.100000000002	4909855.59

```
Execution finished without errors.  
Result: 1 rows returned in 33ms
```

```
Select * FROM RegionCount;
```

	region	count
1	West	3140
2	East	2774
3	Central	2277
4	South	1598

```
Execution finished without errors.  
Result: 4 rows returned in 28ms
```

```
SELECT product_name FROM cleaned_sales_data WHERE ship_mode = "standard class" AND profit > 850 AND quantity < 5;
```

	product_name
1	Panasonic Kx-Tg6844B Expandable ...
2	1.7 Cubic Foot Compact "Cube" Office...
3	It'S Hot Message Books With Stickers...
4	Sterilite Officeware Hinged File Box
5	Avery File Folder Labels
6	Hon Deluxe Fabric Upholstered ...
7	Jm Magazine Binder
8	Staple Envelope
9	Newell 3-Hole Punched Plastic Slotte...
10	Gbc Plasticlear Binding Covers

Execution finished without errors.  
Result: 10 rows returned in 30ms

```
SELECT product_id, product_name FROM cleaned_sales_data where sales < (SELECT avg(sales) from cleaned_sales_data) ORDER by sales DESC LIMIT 10;
```

	product_id	product_name
1	FUR-FU-10003829	Stackable Trays
2	FUR-CH-10002084	Hon Mobius Operator'S Chair
3	OFF-AR-10004022	Panasonic Kp-380Bk Classic Electric ...
4	OFF-BI-10000962	Acco Flexible Accohide Square Ring ...
5	TEC-PH-10001336	Digium D40 Voip Phone
6	OFF-PA-10001019	Xerox 1884
7	TEC-AC-10004568	Maxell Ito Ultrium - 800 Gb
8	OFF-LA-10000248	Avery 52
9	OFF-ST-10000675	File Shuttle Ii And Handi-File, Black
10	TEC-PH-10002844	Speck Products Candyshell Flip Case

Execution finished without errors.  
Result: 10 rows returned in 26ms

```
SELECT DISTINCT s1.product_id, s1.product_name, s1.quantity FROM cleaned_sales_data s1 JOIN cleaned_sales_data s2 on s1.quantity = s2.quantity AND s1.ship_mode = "standard class" ORDER by s1.quantity DESC LIMIT 10;
```

	product_id	product_name	quantity
1	OFF-BI-10003910	Dx1 Angle-View Binders With Locking ...	25
2	OFF-BI-10003656	Fellowes Pb200 Plastic Comb Binding ...	25
3	FUR-CH-10001146	Global Value Mid-Back Manager'S ...	25
4	OFF-BI-10003650	Gbc Docubind 300 Electric Binding ...	25
5	OFF-ST-10002974	Trav-L-File Heavy-Duty Shuttle Ii, ...	25
6	OFF-ST-10003656	Safco Industrial Wire Shelving	25
7	OFF-LA-10002475	Avery 519	25
8	FUR-BO-10004695	O'Sullivan 2-Door Barrister Bookcase...	25
9	OFF-BI-10001658	Gbc Standard Therm-A-Bind Covers	25
10	OFF-BI-10000831	Storex Flexible Poly Binders With ...	25

Execution finished without errors.  
Result: 10 rows returned in 1246ms

```
SELECT DISTINCT s1.product_id, s1.product_name, s1.quantity FROM cleaned_sales_data s1 JOIN
cleaned_sales_data s2 on s1.quantity = s2.quantity AND s1.ship_mode = "standard class" AND
s1.product_id <> s2.product_id ORDER by s1.quantity DESC LIMIT 10;
```

	product_id	product_name	quantity
1	OFF-BI-10003910	Dxl Angle-View Binders With Locking ...	25
2	OFF-BI-10003656	Fellowes Pb200 Plastic Comb Binding ...	25
3	FUR-CH-10001146	Global Value Mid-Back Manager'S ...	25
4	OFF-BI-10003650	Gbc Docubind 300 Electric Binding ...	25
5	OFF-ST-10002974	Trav-L-File Heavy-Duty Shuttle Ii, ...	25
6	OFF-ST-10003656	Safco Industrial Wire Shelving	25
7	OFF-LA-10002475	Avery 519	25
8	FUR-BO-10004695	O'Sullivan 2-Door Barrister Bookcase...	25
9	OFF-BI-10001658	Gbc Standard Therm-A-Bind Covers	25
10	OFF-BI-10000831	Storex Flexible Poly Binders With ...	25

Execution finished without errors.  
Result: 10 rows returned in 1497ms