

# SQL Queries

## 1. Top 10 SKUs Analysis

### Top 10 Most-Selling SKUs by Quantity:

```
Select SKU_NAME, sum(UNIT_SOLD) as total_quantity_sold
From sales_data
Group by SKU_NAME
Order by total_quantity_sold desc
LIMIT 10;
```

sql

	SKU_NAME	total_quantity_sold
▶	Sawa Toilet Soap White 144x20GM	145799
	Detrex Aloe Vera Soap 72 x 80GM	64231
	Sawa Milking Jelly 50ML x 144	54714
	White Wash Multi Purpose Soap White Brilliant C...	50149
	Detrex Pine Drop Soap 72x80gm(With Wrappers)	50035
	Sawa Aloe Vera Glycerine 50ml x 12 x 12	49658
	Detrex Citronella Oil Soap 72 x 80GM	45268
	Detrex Cool Mint Soap 72 x 80GM	39421
	Sawa Toilet Soap Pink 72x70GM	36442
	Sawa Pure Glycerine 30ml x 12 x 12	35342

### Top 10 Most-Selling SKUs by Value:

```
Select SKU_NAME, sum(TOTAL_VALUE_SOLD) as total_value_sold
From sales_data
Group by SKU_NAME
Order by total_value_sold desc
LIMIT 10;
```

sql

	SKU_NAME	total_value_sold
▶	Fresh Fri Oil Jerry Can 2LTx6(N)	3579196.00
	Fresh Fri Oil Jerry Can 5LTx4(N)	3460564.00
	Ushindi Cream Multi-purpose soap 1kg x 10	3199416.00
	Fresh Fri Oil Jerry Can 1LTx12(N)	3100562.00
	Salit Oil Jerry Can 5LTx4	2721760.00
	Salit Oil Jerry Can 3LTx6 (N)	2465280.00
	Fresh Fri Oil Jerry Can 3LTx6(N)	2429376.00
	Salit Oil Jerry Can 2LTx6 (N)	2020047.00
	Ushindi Cream Multi-purpose soap 800gm x 12	1876722.00
	Sawa Aloe Vera Glycerine 50ml x 12 x 12	1688108.00

### Top 10 Least-Selling SKUs by Quantity:

```
Select SKU_NAME, sum(UNIT_SOLD) as total_quantity_sold
From sales_data
Group by SKU_NAME
Order by total_quantity_sold asc
LIMIT 10;
```

sql

SKU_NAME	total_quantity_sold
NULL	NULL
Sawa Toilet Soap Chocolate 24 x 225GM	2
Sawa Body Lotion Soft Glycerine 12 X 600 Ml	3
Sawa Body Lotion Rich Cocoa Butter 12 X 600 Ml	3
Ushindi Orange Dishwashing Liquid 6 x 750 ml B...	4
Detrex Cool Mint Soap 36x100GM	5
New Diva Beauty Soap Olive n Tulip Value Pack ...	9
Sawa Body Lotion Hydration Boost 12 X 600 Ml	9
Frying Fat Yellow Refill 1KGx10	10
Detrex Antibacterial Handwash 300ML x 12	12

### Top 10 Least-Selling SKUs by Value:

```

Select SKU_NAME, sum(TOTAL_VALUE_SOLD) as total_value_sold
From sales_data
Group by SKU_NAME
Order by total_value_sold Asc
LIMIT 10;

```

sql

SKU_NAME	total_value_sold
NULL	NULL
Sawa Toilet Soap Chocolate 24 x 225GM	128.00
Detrex Cool Mint Soap 36x100GM	295.00
Sawa Body Lotion Rich Cocoa Butter 12 X 600 Ml	834.00
Sawa Body Lotion Soft Glycerine 12 X 600 Ml	834.00
Ushindi Orange Dishwashing Liquid 6 x 750 ml B...	940.00
White Wash Multi Purpose Soap White Brilliant C...	956.00
Frymate Fat Yellow Refill 50GMX72	975.00
New Diva Beauty Soap Olive n Tulip Value Pack ...	1278.00
Frymate Fat Yellow Refill 100gx50	1288.00

## 2. Customer Analysis

### Top 10 Customers by Total Value Purchased:

```

Select CUSTOMER_NAME, sum(TOTAL_VALUE_SOLD) as total_purchase_value
From sales_data
Group by CUSTOMER_NAME
Order by total_purchase_value desc
LIMIT 10;

```

sql

	CUSTOMER_NAME	total_purchase_value
▶	KDL DISTRIBUTION	5765450.00
	KGL ELDORET	3639760.00
	AMRILTILAL ELDORET WHOLESALE	2813800.00
	KDL ELDORET	1940650.00
	SUNRISE WHOLESALERS	818712.00
	Massmart Kenya Limited	543988.00
	KDL BUNGOMA	500230.00
	Nguku Wholesalers Limited	424800.00
	UMIYA STORES	393024.00
	HIPAMU SUPERMARKET	355617.00

### 3. Sales Representative Performance

Top 10 Sales Representatives by Value Sold:

```

Select SALES_REP, sum(TOTAL_VALUE_SOLD) as total_value_sold
From sales_data
Group by SALES_REP
Order by total_value_sold desc
LIMIT 10;

```

sql

	SALES_REP	total_value_sold
▶	PAUL OKOTH	16605358.00
	MOSES OJUKA	3309865.00
	ANNAH MWENDE MUSEMBI	2567019.00
	ELOSY MAKENA	2504915.00
	DAVID NDAVI	2225429.00
	MONICA WANGARI	1487556.00
	EVANS WAIGWA	1304020.00
	NUNOW OSMAN	811728.00
	SALINA CHEROBON	790385.00
	FREDRICK OKUMU	782050.00

Top 10 Sales Representatives by Time Spent:

```

Select SALES_REP, sum(TIMESTAMPDIFF(Minute, CHECKIN_TIME, CHECKOUT_TIME)) as total_time_spent
From sales_data
Group by SALES_REP
Order by total_time_spent desc
LIMIT 10;

```

sql

	SALES_REP	total_time_spent
▶	SALINA CHEROBON	49319
	DEBORA AKINYI	41277
	ONESMUS SHOGHOSHO	36550
	PETER KIMETO	33035
	ASKAR KERUBO	31963
	MILTON AKELLO	31772
	WILFRED MUCHAI	30280
	ERICK TSUMA	29443
	DANIEL MUIMI KITHEKA	27039
	FESTUS MWANGO	25495

### Day-wise Averages for Top 10 Sales Representatives:

```

With top_reps as (
    Select SALES_REP
    From sales_data
    Group by SALES_REP
    Order by sum(TOTAL_VALUE_SOLD) desc
    LIMIT 10
)
Select s.SALES_REP, Date(s.CHECKIN_TIME) as visit_date,
    avg(s.TOTAL_VALUE_SOLD) as avg_value_sold,
    avg(TIMESTAMPDIFF(Minute, s.CHECKIN_TIME, s.CHECKOUT_TIME)) as avg_time_spent

From sales_data s
Join top_reps tr on s.SALES_REP = tr.SALES_REP
Group by s.SALES_REP, visit_date
Order by s.SALES_REP, visit_date;

```

	SALES_REP	visit_date	avg_value_sold	avg_time_spent
▶	ANNAH MWENDE MUSEMBI	2025-06-05	6808.687500	21.8108
	ANNAH MWENDE MUSEMBI	2025-06-09	14684.769231	25.3824
	ANNAH MWENDE MUSEMBI	2025-06-10	7203.887097	16.6857
	ANNAH ANNAH MWENDE MUSEMBI		3974.513514	24.6250
	ANNAH MWENDE MUSEMBI	2025-06-12	3809.311111	17.1667
	ANNAH MWENDE MUSEMBI	2025-06-13	2120.909091	23.3929
	ANNAH MWENDE MUSEMBI	2025-06-16	5204.235294	22.2917
	ANNAH MWENDE MUSEMBI	2025-06-19	3461.142857	28.5000
	ANNAH MWENDE MUSEMBI	2025-06-20	3935.868421	19.2955
	ANNAH MWENDE MUSEMBI	2025-06-23	5058.461538	16.9412
	ANNAH MWENDE MUSEMBI	2025-06-24	6444.586207	17.6571
	ANNAH MWENDE MUSEMBI	2025-06-27	12017.000000	20.0784
	ANNAH MWENDE MUSEMBI	2025-06-30	1840.414634	20.1136
	DAVID NDAVI	2025-06-04	1886.000000	15.7292
	DAVID NDAVI	2025-06-09	5236.774194	42.7681
	DAVID NDAVI	2025-06-11	6969.037037	14.5882
	DAVID NDAVI	2025-06-12	1294.736842	16.0455

	SALES_REP	visit_date	avg_value_sold	avg_time_spent
	DAVID NDAVI	2025-06-13	5591.431373	12.4590
	DAVID NDAVI	2025-06-16	6557.800000	13.2593
	DAVID NDAVI	2025-06-17	8665.333333	20.6923
	DAVID NDAVI	2025-06-19	5664.666667	20.7273
	DAVID NDAVI	2025-06-20	9804.000000	14.9375
	DAVID NDAVI	2025-06-23	3115.577465	28.1646
	DAVID NDAVI	2025-06-24	3394.403846	13.7742
	DAVID NDAVI	2025-06-26	11392.727273	11.4444
	DAVID NDAVI	2025-06-27	5085.842105	14.7111
	DAVID NDAVI	2025-06-30	2042.962264	16.8413
	ELOS Y MAKENA	2025-06-03	3943.625000	7.3148
	ELOS Y MAKENA	2025-06-04	2784.486486	6.3750
	ELOS Y MAKENA	2025-06-05	3318.750000	10.9074
	ELOS Y MAKENA	2025-06-07	3209.136364	6.8605
	ELOS Y MAKENA	2025-06-09	2998.448276	11.9091
	ELOS Y MAKENA	2025-06-10	21942.636364	6.0137
	ELOS Y MAKENA	2025-06-11	5702.473684	6.0571

	SALES_REP	visit_date	avg_value_sold	avg_time_spent
▶	ELOS Y MAKENA	2025-06-12	4565.027027	7.1974
	ELOS Y MAKENA	2025-06-14	3915.157895	5.5946
	ELOS Y MAKENA	2025-06-16	3023.583333	9.3390
	ELOS Y MAKENA	2025-06-17	4621.000000	5.3830
	ELOS Y MAKENA	2025-06-18	3635.756757	5.1304
	ELOS Y MAKENA	2025-06-19	3420.416667	5.7600
	ELOS Y MAKENA	2025-06-20	4393.500000	8.0182
	ELOS Y MAKENA	2025-06-23	5373.913043	6.2093
	ELOS Y MAKENA	2025-06-24	4019.058824	6.2097
	ELOS Y MAKENA	2025-06-25	2366.714286	4.8556
	EVANS WAIGWA	2025-06-05	2388.695652	33.6875
	EVANS WAIGWA	2025-06-06	2342.055556	17.6875
	EVANS WAIGWA	2025-06-07	2639.000000	15.1250
	EVANS WAIGWA	2025-06-09	3483.846154	21.5000
	EVANS WAIGWA	2025-06-10	5180.064516	18.3750
	EVANS WAIGWA	2025-06-12	4909.117647	13.5556
	EVANS WAIGWA	2025-06-13	2914.227273	15.7941

	SALES_REP	visit_date	avg_value_sold	avg_time_spent
	EVANS WAIGWA	2025-06-16	4135.911765	19.5000
	EVANS WAIGWA	2025-06-20	3949.083333	12.6486
	EVANS WAIGWA	2025-06-21	3411.500000	11.2105
	EVANS WAIGWA	2025-06-23	3275.526316	27.1698
	EVANS WAIGWA	2025-06-26	3138.433333	24.0930
	EVANS WAIGWA	2025-06-27	4810.086957	9.3158
	EVANS WAIGWA	2025-06-28	4964.565217	14.5116
	FREDRICK OKUMU	2025-06-03	339.244275	9.5077
	FREDRICK OKUMU	2025-06-04	258.623529	1.7167
	FREDRICK OKUMU	2025-06-05	356.022727	2.3704
	FREDRICK OKUMU	2025-06-10	281.615854	1.3923
	FREDRICK OKUMU	2025-06-11	389.512605	3.1558
	FREDRICK OKUMU	2025-06-12	239.297030	2.5053
	FREDRICK OKUMU	2025-06-13	365.144000	1.0714
	FREDRICK OKUMU	2025-06-16	369.722222	3.8476
	FREDRICK OKUMU	2025-06-17	261.256545	1.2537
	FREDRICK OKUMU	2025-06-18	263.774725	5.4474

	SALES_REP	visit_date	avg_value_sold	avg_time_spent
	FREDRICK OKUMU	2025-06-19	245.742268	1.7315
	FREDRICK OKUMU	2025-06-20	283.598726	4.3281
	FREDRICK OKUMU	2025-06-23	227.241206	3.1636
	FREDRICK OKUMU	2025-06-24	336.478571	1.4675
	FREDRICK OKUMU	2025-06-25	233.334975	2.8697
	FREDRICK OKUMU	2025-06-26	254.869565	3.0284
	FREDRICK OKUMU	2025-06-30	317.464052	1.9433
	MONICA WANGARI	2025-06-10	2298.000000	19.3235
	MONICA WANGARI	2025-06-11	3424.916667	9.4583
	MONICA WANGARI	2025-06-12	NULL	138.0000
	MONICA WANGARI	2025-06-16	47980.000000	12.6000
	MONICA WANGARI	2025-06-17	2159.844444	11.9216
	MONICA WANGARI	2025-06-18	4734.000000	17.0000
	MONICA WANGARI	2025-06-19	5269.714286	9.2647
	MONICA WANGARI	2025-06-20	NULL	66.0000
	MONICA WANGARI	2025-06-23	14101.647059	14.3214
	MONICA WANGARI	2025-06-24	40330.857143	20.4242

	SALES_REP	visit_date	avg_value_sold	avg_time_spent
	MOSES OJUKA	2025-06-04	10000	17.5000
	MOSES OJUKA	2025-06-05	9493.388889	14.9365
	MOSES OJUKA	2025-06-09	2759.175000	5.0204
	MOSES OJUKA	2025-06-10	19532.625000	25.9655
	MOSES OJUKA	2025-06-12	10205.000000	11.2000
	MOSES OJUKA	2025-06-13	2969.456522	15.5000
	MOSES OJUKA	2025-06-16	5841.093023	18.8654
	MOSES OJUKA	2025-06-17	14766.500000	265.4118
	MOSES OJUKA	2025-06-18	5778.692308	18.5000
	MOSES OJUKA	2025-06-20	9770.187500	4.6000
	MOSES OJUKA	2025-06-23	7783.605263	8.4314
	MOSES OJUKA	2025-06-24	2936.461538	9.2391
	MOSES OJUKA	2025-06-26	7084.333333	15.7000
	MOSES OJUKA	2025-06-27	5488.735849	8.5424
	MOSES OJUKA	2025-06-30	8138.733333	10.0000
	NUNOW OSMAN	2025-06-03	1203.744186	3.0484
	NUNOW OSMAN	2025-06-04	1693.681818	12.3279

	SALES_REP	visit_date	avg_value_sold	avg_time_spent
	NUNOW OSMAN	2025-06-05	769.228571	7.8333
	NUNOW OSMAN	2025-06-07	599.806452	1.3889
	NUNOW OSMAN	2025-06-09	1048.333333	15.1311
	NUNOW OSMAN	2025-06-10	756.734375	2.7045
	NUNOW OSMAN	2025-06-11	1105.590909	39.6563
	NUNOW OSMAN	2025-06-12	578.852941	9.4545
	NUNOW OSMAN	2025-06-13	361.928571	3.3714
	NUNOW OSMAN	2025-06-14	466.833333	3.2500
	NUNOW OSMAN	2025-06-16	858.435897	7.5253
	NUNOW OSMAN	2025-06-17	601.346939	2.5522
	NUNOW OSMAN	2025-06-18	1417.000000	23.0156
	NUNOW OSMAN	2025-06-19	740.464789	1417.000000
	NUNOW OSMAN	2025-06-20	556.370370	2.3542
	NUNOW OSMAN	2025-06-21	321.836957	2.8925
	NUNOW OSMAN	2025-06-23	813.926471	11.9737
	NUNOW OSMAN	2025-06-24	548.804348	5.5735
	NUNOW OSMAN	2025-06-25	1880.151515	4.9512

	SALES_REP	visit_date	avg_value_sold	avg_time_spent
	NUNOW OSMAN	2025-06-26	910.368421	3.6154
	PAUL OKOTH	2025-06-09	228521.500000	17.6032
	PAUL OKOTH	2025-06-10	41180.000000	4.6667
	PAUL OKOTH	2025-06-11	24654.032258	9.4318
	PAUL OKOTH	2025-06-12	2059.000000	29.5000
	PAUL OKOTH	2025-06-17	3789.975000	10.7115
	PAUL OKOTH	2025-06-18	6634.125000	9.0789
	PAUL OKOTH	2025-06-24	27236.909091	14.7273
	PAUL OKOTH	2025-06-25	9161.250000	6.8750
	PAUL OKOTH	2025-06-26	318274.000000	16.1111
	PAUL OKOTH	2025-06-30	132577.200000	10.5385
	SALINA CHEROBON	2025-06-03	79.165339	4.7901
	SALINA CHEROBON	2025-06-04	94.872941	4.5741
	SALINA CHEROBON	2025-06-05	91.489796	5.6217
	SALINA CHEROBON	2025-06-07	85.706422	4.6147
	SALINA CHEROBON	2025-06-09	84.511202	4.5444
	SALINA CHEROBON	2025-06-10	85.433333	6.2459

	SALES_REP	visit_date	avg_value_sold	avg_time_spent
	SALINA CHEROBON	2025-06-09	84.511202	4.5444
	SALINA CHEROBON	2025-06-10	85.433333	6.2459
	SALINA CHEROBON	2025-06-11	94.479730	4.5965
	SALINA CHEROBON	2025-06-12	93.185520	5.0738
	SALINA CHEROBON	2025-06-13	92.400911	6.7713
	SALINA CHEROBON	2025-06-14	87.066351	7.1232
	SALINA CHEROBON	2025-06-16	92.711111	6.1319
	SALINA CHEROBON	2025-06-17	88.387800	3.9806
	SALINA CHEROBON	2025-06-18	85.211499	3.9080
	SALINA CHEROBON	2025-06-19	89.056306	6.6592
	SALINA CHEROBON	2025-06-20	92.000000	5.0197
	SALINA CHEROBON	2025-06-21	90.312000	6.7680
	SALINA CHEROBON	2025-06-23	91.551487	6.6599
	SALINA CHEROBON	2025-06-24	88.602709	5.8097
	SALINA CHEROBON	2025-06-25	90.975771	4.8186
	SALINA CHEROBON	2025-06-26	89.804494	4.9272
	SALINA CHEROBON	2025-06-30	84.382289	7.3021

#### 4. Detailed Reports for Top 3 Sales Representatives (by Value)

Day-wise Transactions Sheets with following columns

- SKU Sold (Index)
- Price of each SKU
- Quantity Sold
- Value Sold

#### Summary Report Sheet With following columns

- Date (as index)
- Total Quantity Sold
- Total Value Sold
- Number of Unique SKUs Sold
- Count of Unique Customers Served
- Number of Visits Made
- Conversion Percentage
- Total Time Spent

## PAUL OKOTH

```
Select SKU_NAME as "SKU Sold", (TOTAL_VALUE_SOLD / UNIT_SOLD) as "Price of each SKU",
      UNIT_SOLD as "Quantity Sold",
      TOTAL_VALUE_SOLD as "Value Sold"
From sales_data
Where trim(SALES_REP) = 'PAUL OKOTH' and UNIT_SOLD > 0;
```

```
Select CAST(CHECKIN_TIME as Date) as "Date", SUM(UNIT_SOLD) as "Total Quantity Sold",
      SUM(TOTAL_VALUE_SOLD) as "Total Value Sold",
      COUNT(Distinct SKU_NAME) as "Number of Unique SKUs Sold",
      COUNT(Distinct CUSTOMER_NAME) as "Count of Unique Customers Served",
      COUNT(Distinct ENTRY_ID) as "Number of Visits Made",
      (COUNT(Distinct Case When TOTAL_VALUE_SOLD > 0 then ENTRY_ID Else Null End) * 100.0 / COUNT
      (Distinct ENTRY_ID)) as "Conversion Percentage",
      SUM(TIMESTAMPDIFF(MINUTE, CHECKIN_TIME, CHECKOUT_TIME)) as "Total Time Spent"
From sales_data
Where TRIM(SALES_REP) = 'PAUL OKOTH'
Group by CAST(CHECKIN_TIME as Date)
Order by "Date";
```

## MOSES OJUKA

```
Select SKU_NAME as "SKU Sold", (TOTAL_VALUE_SOLD / UNIT_SOLD) as "Price of each SKU",
      UNIT_SOLD as "Quantity Sold",
      TOTAL_VALUE_SOLD as "Value Sold"
```

```

From sales_data
Where trim(SALES_REP) = 'MOSES OJUKA' and UNIT_SOLD > 0;

```

```

Select CAST(CHECKIN_TIME as Date) as "Date", SUM(UNIT_SOLD) as "Total Quantity Sold",
SUM(TOTAL_VALUE_SOLD) as "Total Value Sold",
COUNT(Distinct SKU_NAME) as "Number of Unique SKUs Sold",
COUNT(Distinct CUSTOMER_NAME) as "Count of Unique Customers Served",
COUNT(Distinct ENTRY_ID) as "Number of Visits Made",
(COUNT(Distinct Case When TOTAL_VALUE_SOLD > 0 then ENTRY_ID Else Null End) * 100.0 / COUNT
(Distinct ENTRY_ID)) as "Conversion Percentage",
SUM(TIMESTAMPDIFF(MINUTE, CHECKIN_TIME, CHECKOUT_TIME)) as "Total Time Spent"
From sales_data
When TRIM(SALES_REP) = 'MOSES OJUKA'
Group by CAST(CHECKIN_TIME as Date)
Order by "Date";

```

## ANNAH MWENDE MUSEMBI

```

Select SKU_NAME as "SKU Sold", (TOTAL_VALUE_SOLD / UNIT_SOLD) as "Price of each SKU",      sql
UNIT_SOLD as "Quantity Sold",
TOTAL_VALUE_SOLD as "Value Sold"
From sales_data
Where trim(SALES_REP) = 'ANNAH MWENDE MUSEMBI' and UNIT_SOLD > 0;

```

```

Select CAST(CHECKIN_TIME as Date) as "Date", SUM(UNIT_SOLD) as "Total Quantity Sold",
SUM(TOTAL_VALUE_SOLD) as "Total Value Sold",
COUNT(Distinct SKU_NAME) as "Number of Unique SKUs Sold",
COUNT(Distinct CUSTOMER_NAME) as "Count of Unique Customers Served",
COUNT(Distinct ENTRY_ID) as "Number of Visits Made",
(COUNT(Distinct Case When TOTAL_VALUE_SOLD > 0 then ENTRY_ID Else Null End) * 100.0 / COUNT
(Distinct ENTRY_ID)) as "Conversion Percentage",
SUM(TIMESTAMPDIFF(MINUTE, CHECKIN_TIME, CHECKOUT_TIME)) as "Total Time Spent"
From sales_data
Where TRIM(SALES_REP) = 'ANNAH MWENDE MUSEMBI'
Group by CAST(CHECKIN_TIME as Date)
Order by "Date";

```

**Note:- The required Excel File for the top 3 Sales Representatives has been attached in the shared link.**