

Question 1:

```
2 | SELECT * FROM retail_sales_dataset;
```

Raw results

	Transaction ID	Date	Customer ID	Gender	Age	Product Category	Q
1	1	2023-11-24	CUST001	Male	34	Beauty	
2	2	2023-02-27	CUST002	Female	26	Clothing	
3	3	2023-01-13	CUST003	Male	50	Electronics	
4	4	2023-05-21	CUST004	Male	37	Clothing	
5	5	2023-05-06	CUST005	Male	30	Beauty	
6	6	2023-04-25	CUST006	Female	45	Beauty	
7	7	2023-03-13	CUST007	Male	46	Clothing	

Question 2:

```
4 | SELECT `Transaction ID`,  
5 | `Date`,  
6 | `Customer ID`  
7 | FROM retail_sales_dataset;  
8
```

Raw results

	Transaction ID	Date	Customer ID
1	1	2023-11-24	CUST001
2	2	2023-02-27	CUST002
3	3	2023-01-13	CUST003
4	4	2023-05-21	CUST004
5	5	2023-05-06	CUST005
6	6	2023-04-25	CUST006
7	7	2023-03-13	CUST007
8	8	2023-02-22	CUST008

Question 3:

```
9 | SELECT DISTINCT `Product Category`  
10 | FROM retail_sales_dataset;  
11
```

Raw results

	Product Category
1	Clothing
2	Electronics
3	Beauty

Question 4:

12 | SELECT DISTINCT Gender
13 | FROM retail_sales_dataset;
14 |
15 |

Raw results ▾ +

	A ^B _C Gender
1	Male
2	Female

Question 5:

15 | SELECT * FROM retail_sales_dataset
16 | WHERE Age > 40;
17 |
18 |

Raw results ▾ +

	1 ² ₃ Transcation ID	📅 Date	A ^B _C Customer ID	A ^B _C Gender	1 ² ₃ Age	A ^B _C Product Category
1	3	2023-01-13	CUST003	Male	50	Electronics
2	6	2023-04-25	CUST006	Female	45	Beauty
3	7	2023-03-13	CUST007	Male	46	Clothing
4	9	2023-12-13	CUST009	Male	63	Electronics
5	10	2023-10-07	CUST010	Female	52	Clothing
6	14	2023-01-17	CUST014	Male	64	Clothing
7	15	2023-01-16	CUST015	Female	42	Electronics

Question 6:

18 | SELECT * FROM retail_sales_dataset
19 | WHERE `Price per unit` BETWEEN 100 AND 500;
20 |
21 |

Raw results ▾ +

	1 ² ₃ Transcatio...	📅 Date	A ^B _C Customer ID	A ^B _C Gender	1 ² ₃ Age	A ^B _C Product Category
1	2	2023-02-27	CUST002	Female	26	Clothing
2	4	2023-05-21	CUST004	Male	37	Clothing
3	9	2023-12-13	CUST009	Male	63	Electronics
4	13	2023-08-05	CUST013	Male	22	Electronics
5	15	2023-01-16	CUST015	Female	42	Electronics
6	16	2023-02-17	CUST016	Male	19	Clothing
7	20	2023-11-05	CUST020	Male	22	Clothing

Question 7:

```
21 SELECT*FROM retail_sales_dataset
22 WHERE `Product Category` = 'Beauty' OR `Product Category` = 'Electronics'
23
24
```

Raw results

	1 ² ₃ Transcation ID	📅 Date	A ^B _C Customer ID	A ^B _C Gender	1 ² ₃ Age	A ^B _C Product Category
1	1	2023-11-24	CUST001	Male	34	Beauty
2	3	2023-01-13	CUST003	Male	50	Electronics
3	5	2023-05-06	CUST005	Male	30	Beauty
4	6	2023-04-25	CUST006	Female	45	Beauty
5	8	2023-02-22	CUST008	Male	30	Electronics
6	9	2023-12-13	CUST009	Male	63	Electronics
7	12	2023-10-30	CUST012	Male	35	Beauty

Question 8:

```
24 SELECT *
25 FROM retail_sales_dataset
26 WHERE `Product Category` NOT IN ('Clothing');
27
```

Raw results

	1 ² ₃ Transcation ID	📅 Date	A ^B _C Customer ID	A ^B _C Gender	1 ² ₃ Age	A ^B _C Product Category
1	1	2023-11-24	CUST001	Male	34	Beauty
2	3	2023-01-13	CUST003	Male	50	Electronics
3	5	2023-05-06	CUST005	Male	30	Beauty
4	6	2023-04-25	CUST006	Female	45	Beauty
5	8	2023-02-22	CUST008	Male	30	Electronics
6	9	2023-12-13	CUST009	Male	63	Electronics
7	12	2023-10-30	CUST012	Male	35	Beauty
8						

Question 9:

```
28 | SELECT *
29 | FROM retail_sales_dataset
30 | WHERE `Quantity` >= 3;
31 |
```

Raw results ▾ + 🔍 🗑️ 📄

	1.2 Transaction ID	📅 Date	👤 Customer ID	👤 Gender	1.2 Age	👤 Product Category
1	1	2023-11-24	CUST001	Male	34	Beauty
2	8	2023-02-22	CUST008	Male	30	Electronics
3	10	2023-10-07	CUST010	Female	52	Clothing
4	12	2023-10-30	CUST012	Male	35	Beauty
5	13	2023-08-05	CUST013	Male	22	Electronics
6	14	2023-01-17	CUST014	Male	64	Clothing
7	15	2023-01-16	CUST015	Female	42	Electronics
8						

Question 10:

```
32 | SELECT COUNT(*) AS total_transactions
33 | FROM retail_sales_dataset;
```

Raw results ▾ +

	1.2 total_transactions
1	1000

Question 11:

```
35 | SELECT AVG(`Age`) AS average_age
36 | FROM retail_sales_dataset;
```

Raw results ▾ +

	1.2 average_age
1	41.392

Question 12:

```
38 | SELECT SUM(`Quantity`) AS total_quantity
39 | FROM retail_sales_dataset;
```

Raw results ▾ +

	1.2 total_quantity
1	2514

Question 13:

```
41 SELECT MAX(`Total Amount`) AS max_total_amount
42 FROM retail_sales_dataset;
```

Raw results ▾ +

	¹ ₃ max_total_amount	
1	2000	

Question 14:

```
44 SELECT MIN(`Price Per Unit`) AS min_price_per_unit
45 FROM retail_sales_dataset;
```

Raw results ▾ +

	¹ ₃ min_price_per_unit	
1	25	

Question 15:

```
47 SELECT
48     COUNT(DISTINCT `Transcation ID`) AS transaction_count,
49     `Product Category`
50 FROM retail_sales_dataset
51 GROUP BY `Product Category`;
```

Raw results ▾ +

	¹ ₃ transaction_count	^A ₀ Product Category	
1	351	Clothing	
2	342	Electronics	
3	307	Beauty	

Question 16:

```
53 | SELECT
54 |     SUM(`Total Amount`) AS total_revenue,
55 |     `Gender`
56 | FROM retail_sales_dataset
57 | GROUP BY `Gender`;
```

Raw results ▾ +

	1.2 total_revenue	A.0 Gender
1	223160	Male
2	232840	Female

Question 17:

```
59 | SELECT
60 |     AVG(`Price Per Unit`) AS average_price,
61 |     `Product Category`
62 | FROM retail_sales_dataset
63 | GROUP BY `Product Category`;
```

Raw results ▾ +

	1.2 average_price	A.0 Product Category
1	174.28774928774928	Clothing
2	181.90058479532163	Electronics
3	184.05537459283389	Beauty

Question 18:

```
65 | SELECT
66 |     SUM(`Total Amount`) AS total_revenue,
67 |     `Product Category`
68 | FROM retail_sales_dataset
69 | GROUP BY `Product Category`
70 | HAVING SUM(`Total Amount`) > 1000;
```

Raw results ▾ +

	1.2 total_revenue	A.0 Product Category
1	155580	Clothing
2	156905	Electronics
3	143515	Beauty

Question 19:

```
72 | SELECT
73 |     AVG(`Quantity`) AS average_quantity,
74 |     `Product Category`
75 | FROM retail_sales_dataset
76 | GROUP BY `Product Category`
77 | HAVING AVG(`Quantity`) > 2;
```

Raw results ▾ +

	1.2 average_quantity	A ^B _C Product Category
1	2.547008547008547	Clothing
2	2.482456140350877	Electronics
3	2.511400651465798	Beauty

Question 20:

```
79 | WITH customer_spend AS (
80 |     SELECT
81 |         `Customer ID`,
82 |         SUM(`Total amount`) AS total_spent
83 | FROM retail_sales_dataset
84 | GROUP BY `Customer ID`
85 | )
86 | SELECT
87 |     COUNT(*) AS transaction_count,
88 |     CASE
89 |         WHEN total_spent > 1000 THEN 'High'
90 |         ELSE 'Low'
91 |     END AS spending_level
92 | FROM customer_spend
93 | GROUP BY
94 |     CASE
95 |         WHEN total_spent > 1000 THEN 'High'
96 |         ELSE 'Low'
97 |     END;
```

Raw results ▾ +

	1 ² ₃ transaction_count	A ^B _C spending_level
1	847	Low
2	153	High

Question 21:

```
92 | SELECT
93 |   `Customer ID`,
94 |   `Age`,
95 |   CASE
96 |     WHEN `Age` < 30 THEN 'Youth'
97 |     WHEN `Age` BETWEEN 30 AND 59 THEN 'Adult'
98 |     ELSE 'Senior'
99 |   END AS age_group
100 | FROM retail_sales_dataset;
```

Raw results ▾ +

	Customer ID	Age	age_group
1	CUST001	34	Adult
2	CUST002	26	Youth
3	CUST003	50	Adult
4	CUST004	37	Adult
5	CUST005	30	Adult
6	CUST006	45	Adult
7	CUST007	46	Adult