

# PROJECT FOR SALE RECORD DATASET

Data Analysis & Business Key Problems & Answers

My Analysis & Findings

Q.1 Write a SQL query to retrieve all columns for sales made on '2022-11-05'

Q.2 Write a SQL query to retrieve all transactions where the category is 'Clothing' and the quantity sold is more than 4 and Gender is Male.

Q.3 Write a SQL query to calculate the total sales (total sale) for each category.

Q.4 Write a SQL query to find the average age of customers who purchased items from the 'Beauty' category.

Q.5 Write a SQL query to find all transactions where the total sale is greater than 1000.

Q.6 Write a SQL query to find the total number of transactions (transaction) made by each gender in each category.

Q.7 Write a SQL query to calculate the average sale for each month. Find out best selling month in each year

Q.8 Write a SQL query to find the top 5 customers based on the highest total sales

Q.9 Write a SQL query to find the number of unique customers who purchased items from each category.

Q.10 Write a SQL query to create each shift and number of orders (Example Morning <=12, Afternoon Between 12 & 17, Evening >17)

Q.1 Write a SQL query to retrieve all columns for sales made on '2022-11-05'

Query Result:

transactions_id	sale_date	sale_time	customer_id	gender	age	category	quantity	price_per_unit	cogs	total_sale
180	2022-11-05	10:47:00	117	Male	41	Clothing	3	300	129	900
214	2022-11-05	16:31:00	53	Male	20	Beauty	2	30	8	60
240	2022-11-05	11:49:00	95	Female	23	Beauty	1	300	123	300
856	2022-11-05	17:43:00	102	Male	54	Electronics	4	30	9	120
943	2022-11-05	19:29:00	90	Female	57	Clothing	4	300	318	1200
1137	2022-11-05	22:34:00	104	Male	46	Beauty	2	500	145	1000
1256	2022-11-05	09:58:00	29	Male	23	Clothing	2	500	190	1000
1265	2022-11-05	14:35:00	86	Male	55	Clothing	3	300	111	900
1587	2022-11-05	20:06:00	140	Female	40	Beauty	4	300	105	1200
1819	2022-11-05	20:44:00	83	Female	35	Beauty	2	50	14	100
1896	2022-11-05	20:19:00	87	Female	30	Electronics	2	25	31	50

Q.2 Write a SQL query to retrieve all transactions where the category is 'Clothing' and the quantity sold is more than 4 and Gender are male From 2000 Rows data

Query Result:

transactions_id	sale_date	sale_time	customer_id	gender	age	category	quantity	price_per_unit	cogs	total_sale
14	18-05-2022	7:11:00	8	Male	64	Clothing	4	30	13	120
39	11-07-2023	22:44:00	5	Male	23	Clothing	4	30	9	120
58	16-09-2023	19:18:00	53	Male	18	Clothing	4	300	75	1200
64	15-11-2022	6:34:00	7	Male	49	Clothing	4	25	9	100
124	24-12-2022	21:17:00	83	Male	33	Clothing	4	500	515	2000
138	27-04-2023	10:56:00	127	Male	49	Clothing	4	50	27	200
146	10-11-2022	22:01:00	74	Male	38	Clothing	4	50	49	200
159	10-11-2022	21:30:00	42	Male	26	Clothing	4	50	24	200
166	28-01-2023	11:42:00	32	Male	34	Clothing	4	500	225	2000
186	31-03-2022	18:15:00	92	Male	20	Clothing	4	50	24	200
194	11-10-2023	19:27:00	116	Male	55	Clothing	4	50	52	200
222	07-01-2023	18:56:00	4	Male	51	Clothing	4	30	11	120
transactions_id	sale_date	sale_time	customer_id	gender	age	category	quantity	price_per_unit	cogs	total_sale
222	07-01-2023	18:56:00	4	Male	51	Clothing	4	30	11	120
269	19-09-2022	11:31:00	87	Male	25	Clothing	4	500	250	2000
277	03-07-2023	22:10:00	139	Male	36	Clothing	4	25	12	100
284	12-11-2022	9:17:00	129	Male	43	Clothing	4	50	21	200
287	26-08-2022	11:07:00	88	Male	54	Clothing	4	25	10	100
288	02-05-2022	9:59:00	27	Male	28	Clothing	4	30	12	120
301	30-07-2023	10:58:00	104	Male	30	Clothing	4	30	10	120
312	31-10-2022	18:08:00	18	Male	41	Clothing	4	30	29	120
314	15-10-2023	7:37:00	1	Male	52	Clothing	4	30	8	120
341	20-01-2023	17:06:00	5	Male	31	Clothing	4	50	19	200
360	09-09-2022	9:04:00	26	Male	42	Clothing	4	25	11	100
transactions_id	sale_date	sale_time	customer_id	gender	age	category	quantity	price_per_unit	cogs	total_sale
459	23-05-2023	7:12:00	122	Male	28	Clothing	4	300	75	1200
477	03-12-2023	17:24:00	3	Male	43	Clothing	4	30	16	120
487	09-04-2023	21:03:00	36	Male	44	Clothing	4	500	235	2000
497	31-12-2023	18:11:00	127	Male	41	Clothing	4	30	37	120
547	14-11-2022	7:36:00	3	Male	63	Clothing	4	500	250	2000
553	20-03-2023	6:17:00	106	Male	24	Clothing	4	300	81	1200
572	13-12-2023	18:33:00	5	Male	31	Clothing	4	500	185	2000
663	16-08-2023	6:32:00	133	Male	23	Clothing	4	300	87	1200
688	28-10-2023	21:45:00	132	Male	56	Clothing	4	25	25	100
726	05-06-2022	19:37:00	72	Male	47	Clothing	4	300	126	1200
729	26-08-2023	22:29:00	3	Male	29	Clothing	4	300	84	1200
731	30-09-2023	18:48:00	1	Male	54	Clothing	4	500	165	2000

transactions_id	sale_date	sale_time	customer_id	gender	age	category	quantiy	price_per_unit	cogs	total_sale
736	18-12-2022	8:30:00	97	Male	29	Clothing	4	25	10	100
758	23-04-2023	18:30:00	1	Male	64	Clothing	4	25	7	100
765	16-10-2022	19:03:00	77	Male	43	Clothing	4	50	13	200
786	16-12-2022	20:38:00	78	Male	48	Clothing	4	25	29	100
800	19-09-2022	7:33:00	111	Male	32	Clothing	4	300	87	1200
801	01-12-2022	17:14:00	153	Male	21	Clothing	4	50	19	200
803	25-10-2022	17:16:00	60	Male	39	Clothing	4	25	7	100
824	25-02-2023	19:10:00	3	Male	63	Clothing	4	30	9	120
835	30-09-2022	23:00:00	49	Male	37	Clothing	4	50	60	200
860	11-04-2022	8:58:00	85	Male	63	Clothing	4	50	16	200
876	03-10-2023	19:39:00	104	Male	43	Clothing	4	30	30	120
887	24-02-2022	19:20:00	44	Male	59	Clothing	4	25	10	100
transactions_id	sale_date	sale_time	customer_id	gender	age	category	quantiy	price_per_unit	cogs	total_sale
930	12-01-2023	17:54:00	1	Male	54	Clothing	4	50	26	200
938	16-09-2022	17:55:00	103	Male	49	Clothing	4	50	23	200
965	27-11-2022	21:45:00	84	Male	22	Clothing	4	50	13	200
1014	04-02-2022	10:26:00	147	Male	64	Clothing	4	30	11	120
1039	03-12-2022	20:01:00	1	Male	23	Clothing	4	30	14	120
1058	30-10-2022	18:31:00	100	Male	18	Clothing	4	300	153	1200
1064	14-04-2022	10:38:00	49	Male	49	Clothing	4	25	14	100
1124	06-10-2023	20:04:00	83	Male	33	Clothing	4	500	515	2000
1138	16-10-2023	11:59:00	27	Male	49	Clothing	4	50	15	200
1146	09-10-2023	21:11:00	52	Male	38	Clothing	4	50	60	200
1159	02-04-2023	18:08:00	41	Male	26	Clothing	4	50	18	200
1166	19-07-2023	7:45:00	65	Male	34	Clothing	4	500	245	2000
transactions_id	sale_date	sale_time	customer_id	gender	age	category	quantiy	price_per_unit	cogs	total_sale
1186	10-09-2023	18:24:00	5	Male	20	Clothing	4	50	19	200
1194	09-10-2023	22:06:00	130	Male	55	Clothing	4	50	62	200
1222	17-09-2023	18:15:00	3	Male	51	Clothing	4	30	11	120
1269	01-01-2022	8:09:00	71	Male	25	Clothing	4	500	145	2000
1277	17-10-2023	21:20:00	80	Male	36	Clothing	4	25	13	100
1284	16-12-2022	11:43:00	145	Male	43	Clothing	4	50	18	200
1287	13-09-2022	8:03:00	120	Male	54	Clothing	4	25	7	100
1288	05-04-2022	11:56:00	26	Male	28	Clothing	4	30	9	120
1301	24-09-2023	9:58:00	70	Male	30	Clothing	4	30	11	120
1312	03-12-2022	17:28:00	73	Male	41	Clothing	4	30	29	120
1314	23-05-2023	10:26:00	2	Male	52	Clothing	4	30	16	120
1341	30-01-2023	22:10:00	1	Male	31	Clothing	4	50	21	200
transactions_id	sale_date	sale_time	customer_id	gender	age	category	quantiy	price_per_unit	cogs	total_sale
1360	18-06-2022	9:31:00	93	Male	42	Clothing	4	25	6	100
1400	12-09-2022	11:54:00	115	Male	53	Clothing	4	50	20	200
1459	10-11-2023	6:46:00	13	Male	28	Clothing	4	300	144	1200
1477	08-01-2023	21:59:00	3	Male	43	Clothing	4	30	16	120
1487	01-02-2023	19:01:00	131	Male	44	Clothing	4	500	140	2000
1497	19-11-2022	21:44:00	109	Male	41	Clothing	4	30	32	120
1547	11-08-2022	6:39:00	142	Male	63	Clothing	4	500	235	2000
1553	29-01-2023	8:46:00	42	Male	24	Clothing	4	300	99	1200
1572	18-06-2023	22:20:00	1	Male	31	Clothing	4	500	175	2000
1663	07-12-2023	7:04:00	33	Male	23	Clothing	4	300	81	1200
1688	17-12-2022	17:25:00	150	Male	56	Clothing	4	25	27	100
1726	26-06-2023	18:12:00	13	Male	47	Clothing	4	300	93	1200
transactions_id	sale_date	sale_time	customer_id	gender	age	category	quantiy	price_per_unit	cogs	total_sale
1729	22-11-2023	18:55:00	82	Male	29	Clothing	4	300	81	1200
1731	19-12-2023	17:41:00	3	Male	54	Clothing	4	500	195	2000
1736	28-08-2022	8:57:00	87	Male	29	Clothing	4	25	10	100
1758	22-07-2023	18:19:00	3	Male	64	Clothing	4	25	8	100
1765	18-10-2022	22:49:00	13	Male	43	Clothing	4	50	16	200
1786	27-09-2022	21:26:00	69	Male	48	Clothing	4	25	29	100
1800	21-08-2022	10:53:00	1	Male	32	Clothing	4	300	111	1200
1801	10-07-2022	22:01:00	148	Male	21	Clothing	4	50	14	200
1803	26-12-2023	19:36:00	101	Male	39	Clothing	4	25	9	100
1824	24-01-2023	20:19:00	4	Male	63	Clothing	4	30	13	120
1835	18-09-2022	20:58:00	98	Male	37	Clothing	4	50	50	200
1860	12-03-2022	11:21:00	57	Male	63	Clothing	4	50	18	200
1860	12-03-2022	11:21:00	57	Male	63	Clothing	4	50	18	200
1876	05-11-2023	19:53:00	68	Male	43	Clothing	4	30	32	120
1887	11-12-2023	19:34:00	113	Male	59	Clothing	4	25	10	100
1930	21-12-2023	19:58:00	5	Male	54	Clothing	4	50	13	200
1938	12-10-2022	20:15:00	76	Male	49	Clothing	4	50	14	200
1965	12-12-2022	20:03:00	93	Male	22	Clothing	4	50	50	200

Q.3 Write a SQL query to calculate the total sales (Total\_sale) for each category from 2000 rows data.

category	Total_Sale
Beauty	286790
Clothing	309995
Electronics	311445

Q.4 Write a SQL query to find the average age of customers who purchased items from the 'Beauty' category from 2000 rows of data.

Query Result:

category	Average_Age_ofCustomer
Beauty	40.4157

Q.5 Write a SQL query to find all transactions where the total sale is greater than 1000 from 2000 rows of data.

transactions_id	sale_date	sale_time	customer_id	gender	age	category	quantiy	price_per_unit	cogs	total_sale
13	08-02-2023	17:43:00	106	Male	22	Electronics	3	500	245	1500
15	01-07-2022	11:50:00	75	Female	42	Electronics	4	500	210	2000
16	25-06-2022	10:33:00	82	Male	19	Clothing	3	500	180	1500
31	31-12-2023	17:47:00	3	Male	44	Electronics	4	300	129	1200
46	08-11-2022	17:50:00	54	Female	20	Electronics	4	300	84	1200
47	22-10-2022	17:22:00	96	Female	40	Beauty	3	500	600	1500
54	20-10-2022	10:17:00	142	Female	38	Electronics	3	500	200	1500
58	16-09-2023	19:18:00	53	Male	18	Clothing	4	300	75	1200
65	11-12-2022	20:03:00	84	Male	51	Electronics	4	500	160	2000
67	19-08-2023	20:19:00	119	Female	48	Beauty	4	300	129	1200
72	06-12-2023	19:19:00	5	Female	20	Electronics	4	500	195	2000
74	05-10-2023	19:50:00	56	Female	18	Beauty	4	500	205	2000
78	17-02-2023	21:08:00	68	Female	47	Clothing	3	500	265	1500
89	30-12-2023	21:15:00	117	Female	55	Electronics	4	500	590	2000
93	25-01-2022	20:52:00	148	Female	35	Beauty	4	500	140	2000
99	19-11-2023	15:12:00	71	Female	50	Electronics	4	300	132	1200
107	06-10-2022	9:18:00	75	Female	21	Clothing	4	300	78	1200
109	06-09-2023	19:57:00	94	Female	34	Electronics	4	500	560	2000
111	15-04-2023	9:45:00	5	Female	34	Electronics	3	500	130	1500
112	25-12-2023	18:44:00	57	Male	37	Clothing	3	500	165	1500
transactions_id	sale_date	sale_time	customer_id	gender	age	category	quantiy	price_per_unit	cogs	total_sale
115	02-09-2022	19:21:00	67	Male	51	Clothing	3	500	255	1500
118	13-03-2023	20:07:00	3	Female	30	Electronics	4	500	270	2000
124	24-12-2022	21:17:00	83	Male	33	Clothing	4	500	515	2000
139	15-09-2023	14:03:00	113	Male	36	Beauty	4	500	230	2000
142	08-04-2022	10:05:00	61	Male	35	Electronics	4	300	138	1200
144	26-03-2022	22:18:00	119	Female	59	Beauty	3	500	255	1500
152	16-06-2022	11:58:00	120	Male	43	Electronics	4	500	210	2000
155	18-07-2023	18:05:00	3	Male	31	Electronics	4	500	150	2000
157	15-05-2022	21:59:00	98	Male	62	Electronics	4	500	170	2000
164	28-02-2023	18:26:00	3	Female	47	Beauty	3	500	185	1500
165	24-09-2022	19:01:00	75	Female	60	Clothing	4	300	318	1200
166	28-01-2023	11:42:00	32	Male	34	Clothing	4	500	225	2000
169	28-11-2022	18:47:00	73	Male	18	Beauty	3	500	145	1500
181	06-11-2023	19:59:00	79	Male	19	Electronics	4	300	327	1200
193	27-03-2022	10:40:00	55	Male	35	Beauty	3	500	180	1500
199	26-10-2023	21:34:00	53	Male	45	Beauty	3	500	135	1500
202	25-01-2023	6:24:00	61	Female	34	Clothing	4	300	120	1200
211	12-09-2022	14:02:00	54	Male	42	Beauty	3	500	235	1500
212	12-10-2023	18:13:00	105	Male	21	Clothing	3	500	215	1500
213	13-08-2023	20:48:00	113	Male	27	Beauty	3	500	275	1500
transactions_id	sale_date	sale_time	customer_id	gender	age	category	quantiy	price_per_unit	cogs	total_sale
215	03-10-2022	21:20:00	101	Male	58	Clothing	3	500	145	1500
239	19-09-2022	19:34:00	1	Male	38	Electronics	3	500	165	1500
253	30-09-2022	21:26:00	66	Female	53	Clothing	4	500	525	2000
257	10-12-2022	8:49:00	130	Male	19	Beauty	4	500	165	2000
269	19-09-2022	11:31:00	87	Male	25	Clothing	4	500	250	2000
280	17-11-2023	9:35:00	76	Female	37	Clothing	3	500	240	1500
281	18-09-2023	20:09:00	4	Female	29	Beauty	4	500	275	2000
292	10-10-2022	6:33:00	111	Male	20	Beauty	4	300	141	1200
296	31-12-2022	22:44:00	73	Female	22	Clothing	4	300	369	1200
298	05-10-2023	19:05:00	3	Male	27	Beauty	4	300	84	1200
308	31-03-2022	19:12:00	130	Female	34	Beauty	4	300	126	1200
313	16-12-2023	10:03:00	11	Female	55	Beauty	3	500	140	1500
320	20-04-2022	8:35:00	57	Female	28	Electronics	4	300	159	1200
332	24-04-2023	11:28:00	138	Male	58	Electronics	4	300	105	1200
333	06-10-2022	8:15:00	21	Female	54	Electronics	4	300	99	1200
340	19-09-2023	22:59:00	54	Female	36	Clothing	4	300	294	1200
342	05-11-2023	17:24:00	85	Female	43	Clothing	4	500	500	2000
356	27-08-2023	18:35:00	71	Male	50	Electronics	3	500	255	1500
361	12-09-2022	16:37:00	112	Female	34	Electronics	4	300	81	1200
368	31-01-2023	21:11:00	90	Female	56	Clothing	4	300	132	1200
transactions_id	sale_date	sale_time	customer_id	gender	age	category	quantiy	price_per_unit	cogs	total_sale
369	13-12-2023	19:42:00	111	Male	23	Electronics	3	500	215	1500
372	19-06-2022	11:45:00	27	Female	24	Beauty	3	500	140	1500
385	20-11-2022	19:06:00	127	Male	50	Electronics	3	500	525	1500
405	17-10-2022	17:55:00	79	Female	25	Clothing	4	300	324	1200
412	04-09-2022	19:36:00	30	Female	19	Electronics	4	500	570	2000
416	21-08-2022	9:29:00	55	Male	53	Electronics	4	500	245	2000
420	02-01-2022	10:53:00	28	Female	22	Clothing	4	500	200	2000
421	08-04-2022	8:43:00	66	Female	37	Clothing	3	500	235	1500
424	20-12-2023	19:21:00	101	Male	57	Beauty	4	300	147	1200
431	29-10-2022	22:02:00	99	Male	63	Electronics	4	300	345	1200
437	26-11-2023	18:53:00	56	Female	35	Electronics	4	300	345	1200
441	06-11-2023	22:00:00	85	Male	57	Beauty	4	300	351	1200
447	18-04-2023	17:57:00	37	Male	22	Beauty	4	500	245	2000
452	30-01-2023	22:41:00	4	Female	48	Clothing	3	500	240	1500
459	23-05-2023	7:12:00	122	Male	28	Clothing	4	300	75	1200
462	26-08-2023	10:04:00	71	Male	63	Electronics	4	300	132	1200
463	29-01-2023	20:22:00	55	Female	54	Beauty	3	500	175	1500
474	08-05-2022	17:57:00	145	Female	26	Clothing	3	500	210	1500
476	12-12-2023	18:31:00	131	Female	27	Clothing	4	500	570	2000
479	03-11-2022	21:35:00	90	Male	52	Electronics	4	300	105	1200

transactions_id	sale_date	sale_time	customer_id	gender	age	category	quantiy	price_per_unit	cogs	total_sale
480	22-12-2022	22:12:00	126	Female	42	Beauty	4	500	225	2000
481	13-07-2023	17:12:00	48	Female	43	Electronics	4	300	114	1200
482	12-08-2023	18:57:00	3	Female	28	Clothing	4	300	141	1200
484	13-03-2022	7:52:00	135	Female	19	Clothing	4	300	75	1200
487	09-04-2023	21:03:00	36	Male	44	Clothing	4	500	235	2000
503	08-10-2023	20:06:00	63	Male	45	Beauty	4	500	570	2000
506	29-04-2022	7:13:00	9	Male	34	Beauty	3	500	200	1500
507	11-12-2022	21:40:00	52	Female	37	Electronics	3	500	485	1500
522	09-07-2022	11:00:00	52	Male	46	Beauty	3	500	145	1500
524	17-09-2023	19:52:00	12	Male	46	Beauty	4	300	297	1200
533	13-11-2022	17:19:00	92	Male	19	Electronics	3	500	155	1500
547	14-11-2022	7:36:00	3	Male	63	Clothing	4	500	250	2000
553	20-03-2023	6:17:00	106	Male	24	Clothing	4	300	81	1200
559	12-12-2022	10:48:00	5	Female	40	Clothing	4	300	84	1200
561	29-07-2022	17:04:00	34	Female	64	Clothing	4	500	250	2000
572	13-12-2023	18:33:00	5	Male	31	Clothing	4	500	185	2000
577	21-04-2022	11:55:00	45	Male	21	Beauty	4	500	215	2000
580	14-11-2022	14:44:00	104	Female	31	Clothing	3	500	200	1500
587	04-09-2023	19:00:00	91	Female	40	Beauty	4	300	99	1200
592	26-12-2022	9:15:00	77	Female	46	Beauty	4	500	275	2000

transactions_id	sale_date	sale_time	customer_id	gender	age	category	quantiy	price_per_unit	cogs	total_sale
595	15-10-2022	21:35:00	65	Female	18	Clothing	4	500	210	2000
597	01-11-2022	19:29:00	84	Male	22	Beauty	4	300	111	1200
608	07-12-2022	22:19:00	112	Female	55	Electronics	3	500	200	1500
611	21-07-2022	8:13:00	11	Male	51	Beauty	3	500	180	1500
614	13-02-2023	6:28:00	61	Female	39	Beauty	4	300	120	1200
626	30-10-2022	21:01:00	65	Female	26	Clothing	4	500	555	2000
634	10-10-2022	19:25:00	68	Male	60	Electronics	4	500	535	2000
636	09-05-2023	6:15:00	60	Female	21	Beauty	3	500	230	1500
647	01-03-2023	19:53:00	5	Male	59	Clothing	3	500	190	1500
648	23-02-2023	18:13:00	41	Male	53	Beauty	4	300	138	1200
663	16-08-2023	6:32:00	133	Male	23	Clothing	4	300	87	1200
664	03-09-2022	16:52:00	109	Female	44	Clothing	4	500	170	2000
669	23-01-2022	20:24:00	110	Male	24	Beauty	4	300	87	1200
673	04-07-2022	10:14:00	18	Female	43	Clothing	3	500	270	1500
676	10-07-2023	22:13:00	80	Male	63	Electronics	3	500	205	1500
677	17-12-2022	21:13:00	65	Female	19	Beauty	3	500	555	1500
682	23-10-2023	20:51:00	60	Male	46	Beauty	4	300	354	1200
693	08-06-2023	17:12:00	1	Male	41	Beauty	3	500	270	1500
700	01-09-2022	15:07:00	61	Male	36	Electronics	4	500	250	2000
710	03-09-2022	21:11:00	71	Female	26	Electronics	3	500	495	1500



transactions_id	sale_date	sale_time	customer_id	gender	age	category	quantiy	price_per_unit	cogs	total_sale
711	23-09-2023	22:26:00	103	Male	26	Electronics	3	500	575	1500
716	13-08-2023	19:51:00	137	Female	60	Clothing	4	300	108	1200
720	08-04-2022	8:50:00	116	Female	56	Beauty	3	500	235	1500
726	05-06-2022	19:37:00	72	Male	47	Clothing	4	300	126	1200
729	26-08-2023	22:29:00	3	Male	29	Clothing	4	300	84	1200
731	30-09-2023	18:49:00	1	Male	54	Clothing	4	500	165	2000
735	26-11-2022	21:38:00	153	Female	64	Clothing	4	500	515	2000
742	19-03-2022	6:08:00	37	Female	38	Electronics	4	500	195	2000
743	07-08-2022	7:54:00	55	Female	34	Beauty	4	500	260	2000
756	17-07-2023	20:33:00	4	Female	62	Electronics	4	300	333	1200
757	06-10-2023	12:10:00	82	Female	43	Electronics	4	300	105	1200
773	14-01-2023	19:10:00	3	Male	25	Electronics	4	500	175	2000
789	06-12-2023	22:13:00	34	Female	61	Clothing	4	500	510	2000
800	19-09-2022	7:33:00	111	Male	32	Clothing	4	300	87	1200
805	03-09-2022	13:55:00	59	Female	30	Beauty	3	500	155	1500
808	22-11-2023	7:18:00	30	Male	33	Beauty	4	500	195	2000
828	24-11-2022	15:54:00	76	Female	33	Electronics	4	300	132	1200
832	13-11-2022	17:25:00	106	Male	47	Beauty	4	500	600	2000
839	11-11-2023	21:02:00	130	Female	20	Electronics	4	300	96	1200
843	25-01-2023	22:46:00	3	Male	21	Beauty	3	500	180	1500

transactions_id	sale_date	sale_time	customer_id	gender	age	category	quantiy	price_per_unit	cogs	total_sale
847	10-01-2023	8:42:00	2	Female	18	Electronics	4	300	162	1200
859	20-09-2022	21:52:00	46	Female	56	Electronics	3	500	190	1500
862	11-12-2022	21:37:00	29	Male	28	Electronics	4	300	78	1200
869	08-09-2022	22:16:00	51	Male	37	Beauty	3	500	485	1500
875	30-11-2023	21:47:00	134	Female	51	Electronics	4	500	135	2000
908	30-10-2022	14:47:00	64	Male	46	Beauty	4	300	81	1200
927	21-02-2022	17:13:00	83	Male	43	Electronics	4	500	250	2000
928	05-11-2023	10:20:00	54	Female	35	Clothing	4	300	90	1200
942	01-12-2023	9:22:00	35	Male	51	Clothing	3	500	160	1500
943	05-11-2022	19:29:00	90	Female	57	Clothing	4	300	318	1200
946	08-08-2023	20:15:00	2	Male	62	Electronics	4	500	235	2000
956	24-04-2023	21:50:00	140	Male	30	Clothing	3	500	135	1500
970	25-05-2023	18:13:00	2	Male	59	Electronics	4	500	220	2000
1013	16-07-2022	19:38:00	111	Male	22	Electronics	3	500	200	1500
1015	09-03-2022	11:53:00	94	Female	42	Electronics	4	500	200	2000
1016	12-12-2022	7:39:00	52	Male	19	Clothing	3	500	200	1500
1031	12-11-2023	21:15:00	3	Male	44	Electronics	4	300	126	1200
1046	21-07-2023	21:47:00	5	Female	20	Electronics	4	300	156	1200
1047	04-12-2022	21:53:00	84	Female	40	Beauty	3	500	490	1500
1054	10-01-2022	9:24:00	49	Female	38	Electronics	3	500	140	1500

transactions_id	sale_date	sale_time	customer_id	gender	age	category	quantiy	price_per_unit	cogs	total_sale
1058	30-10-2022	18:31:00	100	Male	18	Clothing	4	300	153	1200
1065	24-10-2023	15:16:00	76	Male	51	Electronics	4	500	175	2000
1067	03-10-2023	17:01:00	105	Female	48	Beauty	4	300	129	1200
1072	24-02-2023	18:10:00	4	Female	20	Electronics	4	500	180	2000
1074	04-10-2022	20:18:00	67	Female	18	Beauty	4	500	230	2000
1078	04-05-2023	22:20:00	16	Female	47	Clothing	3	500	125	1500
1089	21-10-2023	18:44:00	108	Female	55	Electronics	4	500	555	2000
1093	06-11-2023	17:26:00	87	Female	35	Beauty	4	500	270	2000
1099	24-12-2022	12:41:00	56	Female	50	Electronics	4	300	162	1200
1107	31-12-2022	11:14:00	62	Female	21	Clothing	4	300	102	1200
1109	13-12-2023	22:13:00	114	Female	34	Electronics	4	500	590	2000
1111	30-04-2023	21:34:00	2	Female	34	Electronics	3	500	185	1500
1112	22-12-2022	17:11:00	94	Male	37	Clothing	3	500	180	1500
1115	21-09-2023	17:41:00	99	Male	51	Clothing	3	500	180	1500
1118	13-10-2023	17:24:00	1	Female	30	Electronics	4	500	170	2000
1124	06-10-2023	20:04:00	83	Male	33	Clothing	4	500	515	2000
1139	21-12-2023	14:23:00	87	Male	36	Beauty	4	500	230	2000
1142	09-11-2022	9:49:00	2	Male	35	Electronics	4	300	114	1200
1144	30-12-2022	21:27:00	148	Female	59	Beauty	3	500	125	1500
1152	26-12-2022	7:48:00	87	Male	43	Electronics	4	500	170	2000

transactions_id	sale_date	sale_time	customer_id	gender	age	category	quantiy	price_per_unit	cogs	total_sale
1157	23-12-2022	21:24:00	81	Male	62	Electronics	4	500	270	2000
1164	07-04-2023	20:53:00	1	Female	47	Beauty	3	500	245	1500
1165	01-12-2023	17:04:00	29	Female	60	Clothing	4	300	291	1200
1166	19-07-2023	7:45:00	65	Male	34	Clothing	4	500	245	2000
1169	25-09-2022	17:12:00	101	Male	18	Beauty	3	500	255	1500
1181	06-11-2022	18:28:00	84	Male	19	Electronics	4	300	354	1200
1193	11-05-2022	11:31:00	50	Male	35	Beauty	3	500	145	1500
1199	16-12-2023	17:46:00	110	Male	45	Beauty	3	500	190	1500
1202	13-11-2023	6:56:00	89	Female	34	Clothing	4	300	144	1200
1211	22-11-2023	14:59:00	82	Male	42	Beauty	3	500	235	1500
1212	16-03-2022	18:05:00	142	Male	21	Clothing	3	500	265	1500
1213	21-06-2023	17:23:00	41	Male	27	Beauty	3	500	185	1500
1215	19-11-2022	20:44:00	107	Male	58	Clothing	3	500	130	1500
1239	08-07-2022	20:42:00	134	Male	38	Electronics	3	500	255	1500
1253	03-12-2023	19:58:00	108	Female	53	Clothing	4	500	605	2000
1257	10-05-2022	11:55:00	29	Male	19	Beauty	4	500	255	2000
1269	01-01-2022	8:09:00	71	Male	25	Clothing	4	500	145	2000
1280	24-08-2023	9:15:00	116	Female	37	Clothing	3	500	255	1500
1281	14-03-2023	19:34:00	4	Female	29	Beauty	4	500	165	2000
1292	15-05-2022	8:20:00	88	Male	20	Beauty	4	300	90	1200



transactions_id	sale_date	sale_time	customer_id	gender	age	category	quantiy	price_per_unit	cogs	total_sale
1296	26-11-2022	20:42:00	45	Female	22	Clothing	4	300	342	1200
1298	02-05-2023	19:51:00	1	Male	27	Beauty	4	300	120	1200
1308	19-06-2023	22:39:00	91	Female	34	Beauty	4	300	150	1200
1313	04-06-2023	9:22:00	10	Female	55	Beauty	3	500	170	1500
1320	02-11-2022	11:55:00	102	Female	28	Electronics	4	300	84	1200
1332	04-12-2023	10:02:00	146	Male	58	Electronics	4	300	123	1200
1333	01-11-2022	11:38:00	151	Female	54	Electronics	4	300	165	1200
1340	30-10-2023	20:55:00	92	Female	36	Clothing	4	300	348	1200
1342	18-09-2022	23:00:00	114	Female	43	Clothing	4	500	485	2000
1356	18-12-2023	21:31:00	11	Male	50	Electronics	3	500	245	1500
1361	12-09-2023	16:00:00	89	Female	34	Electronics	4	300	153	1200
1368	08-03-2022	21:29:00	145	Female	56	Clothing	4	300	132	1200
1369	10-10-2022	21:14:00	64	Male	23	Electronics	3	500	180	1500
1372	18-03-2022	10:53:00	60	Female	24	Beauty	3	500	145	1500
1385	07-11-2023	19:22:00	55	Male	50	Electronics	3	500	505	1500
1405	28-10-2023	20:08:00	91	Female	25	Clothing	4	300	342	1200
1412	13-10-2022	19:59:00	75	Female	19	Electronics	4	500	615	2000
1416	29-12-2022	10:47:00	111	Male	53	Electronics	4	500	125	2000
1420	15-04-2022	7:01:00	138	Female	22	Clothing	4	500	205	2000
1421	17-01-2022	7:07:00	59	Female	37	Clothing	3	500	185	1500

transactions_id	sale_date	sale_time	customer_id	gender	age	category	quantiy	price_per_unit	cogs	total_sale
1424	05-09-2023	21:32:00	54	Male	57	Beauty	4	300	111	1200
1431	28-09-2023	21:28:00	114	Male	63	Electronics	4	300	312	1200
1437	04-09-2023	19:19:00	76	Female	35	Electronics	4	300	372	1200
1441	04-10-2023	21:38:00	63	Male	57	Beauty	4	300	354	1200
1447	30-05-2022	22:21:00	137	Male	22	Beauty	4	500	155	2000
1452	06-08-2023	17:41:00	3	Female	48	Clothing	3	500	185	1500
1459	10-11-2023	6:46:00	13	Male	28	Clothing	4	300	144	1200
1462	13-11-2023	10:42:00	124	Male	63	Electronics	4	300	114	1200
1463	29-07-2022	19:45:00	98	Female	54	Beauty	3	500	170	1500
1474	15-05-2022	20:49:00	84	Female	26	Clothing	3	500	255	1500
1476	11-11-2022	22:27:00	130	Female	27	Clothing	4	500	555	2000
1479	31-05-2022	22:24:00	108	Male	52	Electronics	4	300	162	1200
1480	26-11-2023	18:05:00	3	Female	42	Beauty	4	500	165	2000
1481	09-11-2023	17:22:00	20	Female	43	Electronics	4	300	114	1200
1482	10-02-2023	22:22:00	1	Female	28	Clothing	4	300	114	1200
1484	23-11-2022	9:29:00	22	Female	19	Clothing	4	300	147	1200
1487	01-02-2023	19:01:00	131	Male	44	Clothing	4	500	140	2000
1503	17-10-2022	18:28:00	67	Male	45	Beauty	4	500	605	2000
1506	09-01-2022	7:31:00	52	Male	34	Beauty	3	500	245	1500
1507	27-12-2022	22:14:00	95	Female	37	Electronics	3	500	520	1500

transactions_id	sale_date	sale_time	customer_id	gender	age	category	quantiy	price_per_unit	cogs	total_sale
1522	14-11-2022	8:35:00	48	Male	46	Beauty	3	500	235	1500
1524	26-10-2022	22:10:00	115	Male	46	Beauty	4	300	321	1200
1533	29-10-2022	19:35:00	67	Male	19	Electronics	3	500	255	1500
1547	11-08-2022	6:39:00	142	Male	63	Clothing	4	500	235	2000
1553	29-01-2023	8:46:00	42	Male	24	Clothing	4	300	99	1200
1559	20-08-2022	7:40:00	49	Female	40	Clothing	4	300	144	1200
1561	17-09-2023	19:38:00	16	Female	64	Clothing	4	500	170	2000
1572	18-06-2023	22:20:00	1	Male	31	Clothing	4	500	175	2000
1577	11-09-2022	6:22:00	145	Male	21	Beauty	4	500	160	2000
1580	21-09-2023	15:47:00	105	Female	31	Clothing	3	500	250	1500
1587	05-11-2022	20:06:00	140	Female	40	Beauty	4	300	105	1200
1592	16-03-2022	9:08:00	81	Female	46	Beauty	4	500	155	2000
1595	04-10-2023	17:44:00	115	Female	18	Clothing	4	500	255	2000
1597	28-08-2023	18:21:00	32	Male	22	Beauty	4	300	78	1200
1608	26-09-2023	21:01:00	87	Female	55	Electronics	3	500	265	1500
1611	17-11-2022	7:30:00	125	Male	51	Beauty	3	500	180	1500
1614	23-08-2023	11:37:00	135	Female	39	Beauty	4	300	105	1200
1626	10-10-2022	19:13:00	19	Female	26	Clothing	4	500	495	2000
1634	03-11-2023	17:18:00	90	Male	60	Electronics	4	500	520	2000
1636	22-07-2023	11:26:00	50	Female	21	Beauty	3	500	150	1500

transactions_id	sale_date	sale_time	customer_id	gender	age	category	quantiy	price_per_unit	cogs	total_sale
1647	01-05-2023	20:26:00	5	Male	59	Clothing	3	500	240	1500
1648	10-07-2023	17:18:00	16	Male	53	Beauty	4	300	87	1200
1663	07-12-2023	7:04:00	33	Male	23	Clothing	4	300	81	1200
1664	12-12-2023	16:44:00	99	Female	44	Clothing	4	500	245	2000
1669	04-08-2022	22:28:00	83	Male	24	Beauty	4	300	123	1200
1673	14-06-2022	7:36:00	42	Female	43	Clothing	3	500	185	1500
1676	21-09-2023	20:22:00	91	Male	63	Electronics	3	500	210	1500
1677	02-10-2022	20:51:00	84	Female	19	Beauty	3	500	490	1500
1682	30-12-2022	19:30:00	71	Male	46	Beauty	4	300	315	1200
1693	20-02-2023	18:21:00	1	Male	41	Beauty	3	500	130	1500
1700	27-09-2023	16:10:00	87	Male	36	Electronics	4	500	210	2000
1710	23-10-2022	20:14:00	104	Female	26	Electronics	3	500	610	1500
1711	22-09-2023	20:33:00	113	Male	26	Electronics	3	500	570	1500
1716	12-02-2022	19:16:00	39	Female	60	Clothing	4	300	87	1200
1720	10-10-2022	8:51:00	28	Female	56	Beauty	3	500	190	1500
1726	26-06-2023	18:12:00	13	Male	47	Clothing	4	300	93	1200
1729	22-11-2023	18:55:00	82	Male	29	Clothing	4	300	81	1200
1731	19-12-2023	17:41:00	3	Male	54	Clothing	4	500	195	2000
1735	05-09-2023	17:26:00	86	Female	64	Clothing	4	500	505	2000
1742	22-11-2022	8:25:00	18	Female	38	Electronics	4	500	220	2000

transactions_id	sale_date	sale_time	customer_id	gender	age	category	quantiy	price_per_unit	cogs	total_sale
1743	26-10-2022	9:37:00	47	Female	34	Beauty	4	500	250	2000
1756	12-05-2022	22:16:00	119	Female	62	Electronics	4	300	297	1200
1757	29-09-2023	16:42:00	50	Female	43	Electronics	4	300	132	1200
1773	12-12-2023	18:50:00	80	Male	25	Electronics	4	500	165	2000
1789	10-11-2023	17:02:00	144	Female	61	Clothing	4	500	615	2000
1800	21-08-2022	10:53:00	1	Male	32	Clothing	4	300	111	1200
1805	10-10-2023	13:35:00	79	Female	30	Beauty	3	500	225	1500
1808	12-02-2023	10:48:00	109	Male	33	Beauty	4	500	210	2000
1828	14-10-2022	14:14:00	99	Female	33	Electronics	4	300	165	1200
1832	10-11-2023	21:17:00	57	Male	47	Beauty	4	500	480	2000
1839	28-08-2022	21:57:00	92	Female	20	Electronics	4	300	156	1200
1843	21-09-2023	18:58:00	1	Male	21	Beauty	3	500	240	1500
1847	28-07-2023	7:14:00	5	Female	18	Electronics	4	300	123	1200
1859	14-09-2022	20:58:00	32	Female	56	Electronics	3	500	205	1500
1862	06-02-2022	22:50:00	64	Male	28	Electronics	4	300	165	1200
1869	23-10-2022	19:51:00	113	Male	37	Beauty	3	500	605	1500
1875	03-06-2022	22:42:00	141	Female	51	Electronics	4	500	165	2000
1908	17-12-2023	12:34:00	93	Male	46	Beauty	4	300	87	1200
1927	06-09-2023	19:44:00	46	Male	43	Electronics	4	500	180	2000
1928	29-07-2023	6:39:00	93	Female	35	Clothing	4	300	75	1200
1942	16-09-2023	11:53:00	112	Male	51	Clothing	3	500	265	1500
1943	17-11-2023	21:00:00	108	Female	57	Clothing	4	300	321	1200
1946	27-07-2023	20:48:00	5	Male	62	Electronics	4	500	165	2000
1956	01-06-2023	20:40:00	62	Male	30	Clothing	3	500	170	1500
1970	22-05-2023	17:44:00	5	Male	59	Electronics	4	500	230	2000

Q.6 Write a SQL query to find the total number of transactions (transactionid) made by each gender in each category and order by gender ascending from 2000 rows of data.

Query Result:

Total_Number_Of_Transactions	Gender	Category
320538	Female	Beauty
348962	Female	Clothing
340831	Female	Electronics
284895	Male	Beauty
345255	Male	Clothing
347539	Male	Electronics

Q.7 Write a SQL query to find the top 5 customers based on the highest total sales from 2000 rows of data.

Customer_Number	Total_Sale
3	38440
1	30750
5	30405
2	25295
4	23580

Q.8 Write a SQL query to find the number of unique customers who purchased items from each category from 2000 rows of data.

category	unique_customers
Beauty	141
Clothing	149
Electronics	144

Q.9 Write a SQL query to create each shift and number of orders (Example Morning <=12, Afternoon Between 12 & 17, Evening >17)

customer_id	total_sales
3	38440
1	30750
5	30405
2	25295
4	23580

Q.10 Write a SQL query to calculate the average sale for each month. Find out best selling month in each year from 2000 rows of data.



year	sale_month_name	avg_sale
2022	December	460.7692
2022	June	481.3953
2023	August	495.9649
2023	September	462.7397
2023	November	453.4524
2023	July	427.6786
2022	October	467.1379
2022	February	366.1364
2023	February	535.5319
2022	May	480.0000
2022	July	541.3415
2023	December	490.3901
2022	November	472.0205
2023	October	399.1724
2022	March	521.2222
2023	May	450.1667
2023	March	394.8077
2022	September	485.1969
2022	January	397.1053
2023	June	438.4821
2022	April	500.6140
2023	April	466.4894
2023	January	396.5000
2022	August	390.2778

