Professor Leavitt

Database 331 Project 2

Daymon Wu

Normalization:

```
TABLE 1: SUMMONED VEHICLE OWNER
```

CREATE TABLE Summoned_Vehicle_Owner(

SUMMONS_NUMBER VARCHAR2(36 Byte),

PLATE VARCHAR2(26 Byte)

);

INSERT INTO Summoned_Vehicle_Owner(SUMMONS_NUMBER, PLATE)

SELECT

SUMMONS_NUMBER,

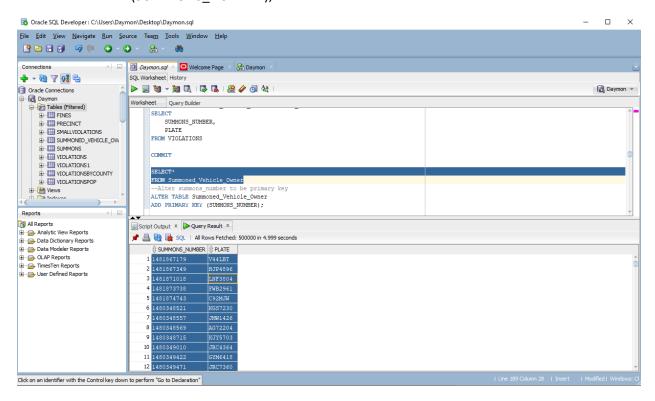
PLATE

FROM VIOLATIONS

--Alter summons_number to be primary key

ALTER TABLE Summoned_Vehicle_Owner

ADD PRIMARY KEY (SUMMONS_NUMBER);



PRINTOUT OF TABLE 1:

	ı
SUMMONS_NUMBER	PLATE
1481867179	V44LBT
1481867349	HJP4896
1481871018	LNF3804
1481873738	FWB2961
1481874743	C92MJW
1480348521	KGS7230
1480348557	JMW1426
1480348569	AG72204
1480348715	KJY5703
1480349010	JRC4364
1480349422	GYM6418
1480349471	JRC7360
1480349495	AY31507
1480349501	T682740C
1480349562	HYS4820
1480349604	JJM2468
1480349630	HCL1992
1472224887	KGG3094
1480349690	JRW1845
1480350266	934YTM
1480351430	KKG3236
1480351441	HVY8308
1480351570	KEH3049
1480359580	JGZ9947
1480359634	JNB1833
1480359646	KKT1206

TABLE 2: SUMMONS

CREATE TABLE Summons(

SUMMONS_NUMBER VARCHAR2(36 Byte),

ISSUE_DATE DATE,

VIOLATION_TIME VARCHAR2(26 Byte),

VIOLATION VARCHAR2(128 Byte),

ISSUING_AGENCY VARCHAR2(40 Byte),

VIOLATION_STATUS VARCHAR2(128 Byte)

INSERT INTO

Summons(SUMMONS_NUMBER,ISSUE_DATE,VIOLATION_TIME,VIOLATION,ISSUING_AGENCY,VIOLATION_STATUS)

SELECT

SUMMONS_NUMBER,

ISSUE DATE,

VIOLATION TIME,

VIOLATION,

ISSUING_AGENCY,

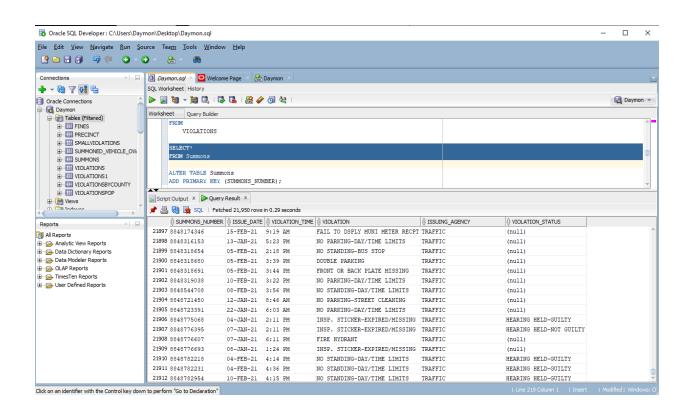
VIOLATION_STATUS

FROM

VIOLATIONS

ALTER TABLE Summons

ADD PRIMARY KEY (SUMMONS_NUMBER);



PRINTOUT OF TABLE 2:

SUMMONS	ISSUE	VIOLATIO	VIOLATION	ISSUING_AGENCY	VIOLATION_STATU
_NUMBER	_DATE	_	0.000011000110		S
147178593	8-	6:02 AM	OBSTRUCTING	POLICE DEPARTMENT	
2	Mar-		DRIVEWAY		
	21				
146614762	15-	10:01	NO STANDING-EXC.	OTHER/UNKNOWN	
3	Jan-21	AM	AUTH. VEHICLE	AGENCIES	
147235825	5-Feb-	3:13 AM	OBSTRUCTING	POLICE DEPARTMENT	HEARING HELD-
9	21		DRIVEWAY		GUILTY
147236262	10-	3:00 AM	STORAGE-3HR	POLICE DEPARTMENT	
7	Feb-		COMMERCIAL		
	21				
147240893	10-	10:25 PM	OBSTRUCTING	POLICE DEPARTMENT	
7	Feb-		DRIVEWAY		
	21				
147243578	9-Feb-	5:39 AM	FIRE HYDRANT	POLICE DEPARTMENT	
3	21				
147998109	16-	7:38 AM	NO PARKING-STREET	DEPARTMENT OF	
6	Feb-		CLEANING	SANITATION	
	21				
147610881	6-Feb-	8:20 AM	TRAFFIC LANE	POLICE DEPARTMENT	
0	21				
147149968	2-Jan-	2:05 AM	FIRE HYDRANT	POLICE DEPARTMENT	
6	21				
147785256	22-	4:10 AM	FIRE HYDRANT	DEPARTMENT OF	
6	Feb-			SANITATION	
	21				
147872839	16-	4:12 AM	NO PARKING-	OTHER/UNKNOWN	
5	Feb-		DAY/TIME LIMITS	AGENCIES	
	21				
147177151	22-	7:30 PM	OBSTRUCTING	POLICE DEPARTMENT	
9	Feb-		DRIVEWAY		
	21				
147247051	7-Feb-	8:58 AM	OBSTRUCTING	POLICE DEPARTMENT	
5	21	3.557	DRIVEWAY		
147249244	10-	7:13 PM	OBSTRUCTING	POLICE DEPARTMENT	
4	Feb-	7.1311	DRIVEWAY	. SLISE DELYMINITALINI	
•	1 03		DIGIVE VV/CI	1	

	21				
147672398	2-	4:22 PM	NO STANDING-	POLICE DEPARTMENT	
9	Mar-		DAY/TIME LIMITS		
	21				
147172049	3-Jan-	8:26 PM	STORAGE-3HR	POLICE DEPARTMENT	
4	21		COMMERCIAL		
147154788	13-	6:21 AM	FIRE HYDRANT	POLICE DEPARTMENT	HEARING HELD-
7	Jan-21				NOT GUILTY
148239433	9-	7:12 PM	NO STANDING-BUS	POLICE DEPARTMENT	
9	Mar-		STOP		
	21				
147177506	4-Jan-	6:55 PM	NO STANDING-BUS	POLICE DEPARTMENT	HEARING HELD-
9	21		STOP		NOT GUILTY
148239439	10-	5:35 PM	NO STANDING-BUS	POLICE DEPARTMENT	HEARING HELD-
0	Mar-		STOP		NOT GUILTY
	21				
147322255	4-Jan-	11:30	OBSTRUCTING	POLICE DEPARTMENT	
2	21	AM	DRIVEWAY		
147230188	1-Jan-	5:42 PM	INSP. STICKER-	POLICE DEPARTMENT	
2	21		EXPIRED/MISSING		
147233519	3-Jan-	10:45 PM	OBSTRUCTING	POLICE DEPARTMENT	
3	21		DRIVEWAY		

TABLE 3: FINES

SUMMONS_NUMBER,

```
CREATE TABLE Fines(

SUMMONS_NUMBER VARCHAR2(36 Byte),

PLATE VARCHAR2(26 Byte),

FINE_AMOUNT NUMBER(38,0),

INTEREST_AMOUNT NUMBER(38,2),

REDUCTION_AMOUNT NUMBER(38,2),

PAYMENT_AMOUNT NUMBER(38,2),

AMOUNT_DUE NUMBER(38,0)

);

INSERT INTO
Fines(SUMMONS_NUMBER,PLATE,FINE_AMOUNT,PENALTY_AMOUNT,INTEREST_AMOUNT,REDUCTION_AMOUNT,PAYMENT_AMOUNT,AMOUNT_DUE)

SELECT
```

PLATE,

TO_CHAR(FINE_AMOUNT,'\$999,999,999')"FINE_AMOUNT",

TO_CHAR(PENALTY_AMOUNT, '\$999,999,999')"PENALTY_AMOUNT",

TO_CHAR(INTEREST_AMOUNT, '\$999,999,999.99')"INTEREST_AMOUNT",

TO_CHAR(REDUCTION_AMOUNT, '\$999,999,999.99')"REDUCTION_AMOUNT",

TO_CHAR(PAYMENT_AMOUNT, '\$999,999,999')"PAYMENT_AMOUNT",

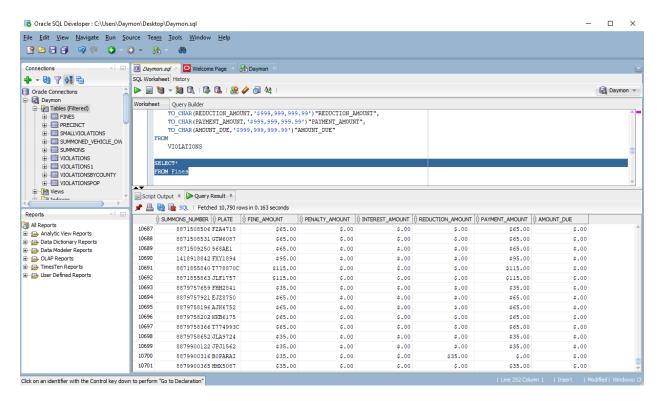
TO_CHAR(AMOUNT_DUE,'\$999,999,999.99')"AMOUNT_DUE"

FROM

VIOLATIONS

ALTER TABLE Summons

ADD PRIMARY KEY (SUMMONS_NUMBER);



PRINTOUT OF TABLE 3:

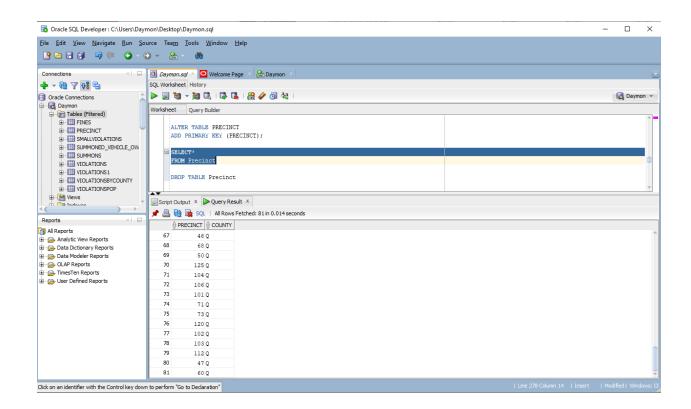
SUMMONS_	PLATE	FINE_A	PENALTY_A	INTEREST_	REDUCTION_	PAYMENT_	AMOUN
NUMBER		MOUNT	MOUNT	AMOUNT	AMOUNT	AMOUNT	T_DUE
1481867179	V44LBT	\$95.00	\$0.00	\$0.00	\$0.00	\$95.00	\$0.00
1481867349	HJP489	\$60.00	\$0.00	\$0.00	\$0.00	\$60.00	\$0.00

	6						
1481871018	LNF380 4	\$95.00	\$0.00	\$0.00	\$0.00	\$95.00	\$0.00
1481873738	FWB29 61	\$115.00	\$0.00	\$0.00	\$0.00	\$115.00	\$0.00
1481874743	C92MJ W	\$115.00	\$0.00	\$0.00	\$0.00	\$115.00	\$0.00
1480348521	KGS723 0	\$60.00	\$0.00	\$0.00	\$0.00	\$60.00	\$0.00
1480348557	JMW14 26	\$60.00	\$0.00	\$0.00	\$0.00	\$60.00	\$0.00
1480348569	AG722 04	\$60.00	\$0.00	\$0.00	\$0.00	\$60.00	\$0.00
1480348715	KJY570 3	\$60.00	\$0.00	\$0.00	\$0.00	\$60.00	\$0.00
1480349010	JRC436 4	\$60.00	\$0.00	\$0.00	\$0.00	\$60.00	\$0.00
1480349422	GYM64 18	\$60.00	\$0.00	\$0.00	\$0.00	\$60.00	\$0.00
1480349471	JRC736 0	\$60.00	\$0.00	\$0.00	\$0.00	\$60.00	\$0.00
1480349495	AY3150 7	\$60.00	\$0.00	\$0.00	\$0.00	\$60.00	\$0.00
1480349501	T68274 0C	\$60.00	\$0.00	\$0.00	\$0.00	\$60.00	\$0.00
1480349562	HYS482 0	\$60.00	\$0.00	\$0.00	\$0.00	\$60.00	\$0.00
1480349604	JJM246 8	\$60.00	\$0.00	\$0.00	\$0.00	\$60.00	\$0.00
1480349630	HCL199 2	\$60.00	\$0.00	\$0.00	\$0.00	\$60.00	\$0.00
1472224887	KGG30 94	\$95.00	\$0.00	\$0.00	\$0.00	\$95.00	\$0.00
1480349690	JRW18 45	\$60.00	\$0.00	\$0.00	\$0.00	\$60.00	\$0.00
1480350266	934YT M	\$60.00	\$0.00	\$0.00	\$0.00	\$60.00	\$0.00
1480351430	KKG323 6	\$60.00	\$0.00	\$0.00	\$0.00	\$60.00	\$0.00
1480351441	HVY830 8	\$60.00	\$0.00	\$0.00	\$0.00	\$60.00	\$0.00
1480351570	KEH304 9	\$60.00	\$0.00	\$0.00	\$0.00	\$60.00	\$0.00
1480359580	JGZ994 7	\$60.00	\$0.00	\$0.00	\$0.00	\$60.00	\$0.00
1480359634	JNB183 3	\$60.00	\$0.00	\$0.00	\$0.00	\$60.00	\$0.00

1480359646	KKT120	\$60.00	\$0.00	\$0.00	\$0.00	\$60.00	\$0.00
	6						
1480359853	FER132	\$60.00	\$0.00	\$0.00	\$0.00	\$60.00	\$0.00
	0						
1480360843	JCJ6076	\$60.00	\$0.00	\$0.00	\$0.00	\$60.00	\$0.00
1480360934	FPA155	\$60.00	\$0.00	\$0.00	\$0.00	\$60.00	\$0.00
	1						
1480360983	JMZ847	\$60.00	\$0.00	\$0.00	\$0.00	\$60.00	\$0.00
	2						
1480365312	JRU223	\$60.00	\$0.00	\$0.00	\$0.00	\$60.00	\$0.00
	0						
1307574671	KFM55	\$95.00	\$0.00	\$0.00	\$0.00	\$95.00	\$0.00
	58						

TABLE 4: PRECINCT

```
CREATE TABLE Precinct(
PRECINCT NUMBER(38,0),
COUNTY VARCHAR2(26 BYTE)
);
INSERT INTO Precinct(PRECINCT,COUNTY)
SELECT
DISTINCT
PRECINCT,
COUNTY
FROM VIOLATIONS
ALTER TABLE PRECINCT
ADD PRIMARY KEY (PRECINCT);
```



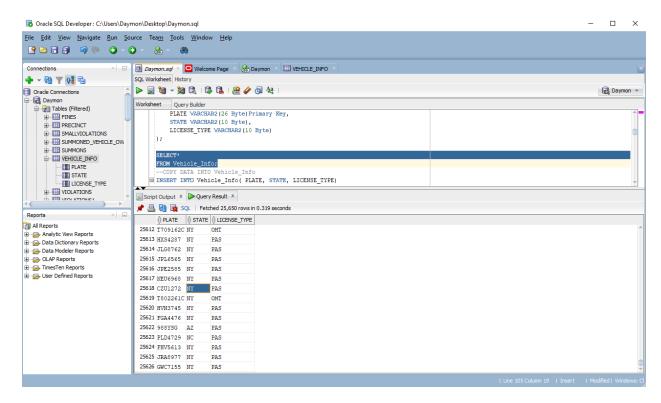
PRINTOUT OF TABLE 4:

PRECINCT	COUNTY
108	Q
107	Q
61	Q
119	Q
9	Q
100	Q
75	Q
14	Q
170	Q
26	Q
72	Q
105	Q
83	Q
116	Q
44	Q
174	Q
19	Q
0	Q
25	Q

165	Q
114	Q
118	Q
70	Q
40	Q
63	Q
77	Q

TABLE 5: VEHICLE_INFO

```
CREATE TABLE Vehicle_Info(
PLATE VARCHAR2(26 Byte)Primary Key,
STATE VARCHAR2(10 Byte),
LICENSE_TYPE VARCHAR2(10 Byte)
);
INSERT INTO Vehicle_Info( PLATE, STATE, LICENSE_TYPE)
SELECT
DISTINCT
PLATE,
STATE,
LICENSE_TYPE
FROM
VIOLATIONS
ALTER TABLE Vehicle_Info
ADD PRIMARY KEY(PLATE);
```



PRINTOUT OF TABLE 5:

PLATE	STATE	LICENSE_TYPE
JJM6670	NY	PAS
JEJ4142	NY	PAS
JDZ7865	NY	PAS
JMU5567	NY	PAS
JPD8137	NY	PAS
LLW8518	PA	PAS
T765242C	NY	OMT
GPK9309	NY	PAS
GTY1542	NY	PAS
KDD1813	NY	PAS
JRC7603	NY	PAS
M068821	ОН	PAS
JAU8279	NY	PAS
GXF9181	NY	PAS
DCS8240	NY	PAS
HZK4891	NY	PAS
F70LYM	NJ	PAS
ELL4422	NY	PAS
HVY7042	NY	PAS
HAC2627	NY	PAS

T709493C	NY	OMT
JRC7027	NY	PAS
JFG7449	NY	PAS
EAZ8950	NY	PAS
HYX9917	NY	PAS
JFZ8187	NY	PAS

QUESTIONS:

1. Identify the number of violations for a 6-month period. Display 1 row with the number of violations.

SELECT

EXTRACT(MONTH FROM ISSUE_DATE) AS month,

COUNT(1) AS count

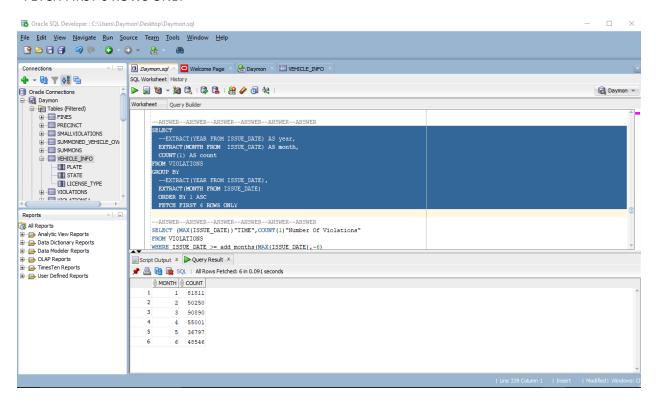
FROM VIOLATIONS

GROUP BY

EXTRACT(MONTH FROM ISSUE_DATE)

ORDER BY 1 ASC

FETCH FIRST 6 ROWS ONLY



- 1 81811
- 2 50250
- 3 90890
- 4 55001
- 5 36797
- 6 48546

2. Identify the violations by county. Display 3 columns: county, number of violations, total fine amount.

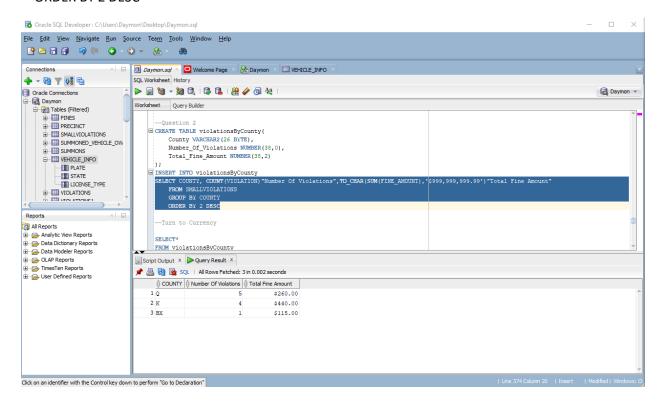
The county with the largest number of violations is displayed first. Display 1 row for each distinct county.

SELECT COUNTY, COUNT(VIOLATION)"Number Of Violations",TO_CHAR(SUM(FINE_AMOUNT),'\$999,999,999.99')"Total Fine Amount"

FROM SMALLVIOLATIONS

GROUP BY COUNTY

ORDER BY 2 DESC



COUNTY	Number Of		Total Fine	
	Violations		Amount	
Q		5	\$260.00	
K		4	\$440.00	
BX		1	\$115.00	

3. Identify the violations by license plate. Display 4 columns: License plate, license state, number of violations and total cost. The license plate with the most violations is displayed first. Display 1 row for each distinct license plate.

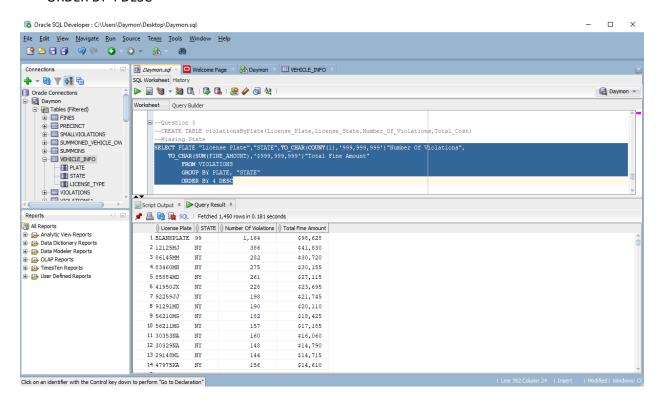
SELECT PLATE "License Plate", "STATE", TO_CHAR(COUNT(1), '999, 999, 999') "Number Of Violations",

TO CHAR(SUM(FINE AMOUNT), '\$999,999,999')"Total Fine Amount"

FROM VIOLATIONS

GROUP BY PLATE, "STATE"

ORDER BY 4 DESC



		Number	Total
License		Of	Fine
Plate	STATE	Violations	Amount
BLANKPLATE	99	1,164	\$98,628
12125MJ	NY	386	\$41,830
86145MM	NY	282	\$30,720
83460MH	NY	275	\$30,155
85884MD	NY	261	\$27.115

41950JX	NY	228	\$23,695
92259JJ	NY	198	\$21,745
91291MD	NY	190	\$20,110
56210MG	NY	182	\$18,425
56211MG	NY	157	\$17,185
30353NA	NY	160	\$16,060
30329NA	NY	148	\$14,790
29148ML	NY	144	\$14,715
47975KA	NY	156	\$14,610
92253JJ	NY	145	\$14,085
75142MB	NY	147	\$13,985
66788ME	NY	131	\$13,245
41962JX	NY	121	\$11,940
44184MK	NY	124	\$11,890
95492MD	NY	119	\$11,285
12039MJ	NY	103	\$10,125
88502JU	NY	127	\$10,125
62189MM	NY	96	\$9,840
28559MH	NY	101	\$9,790
85849MD	NY	93	\$9,695
66783ME	NY	115	\$9,565
62191MM	NY	90	\$9,490
41825JX	NY	88	\$9,075
41958JX	NY	91	\$9,030
12922JB	NY	87	\$8,860
22215MM	NY	82	\$8,660
44119MK	NY	94	\$8,570
62227MM	NY	79	\$8,530
26302TC	NY	98	\$8,500
44139MK	NY	80	\$8,270
30248NA	NY	80	\$8,225
60304MD	NY	79	\$8,015
88356JX	NY	70	\$7,400
80635JW	NY	88	\$7,395
59907MJ	NY	80	\$7,385
58915MM	NY	75	\$7,065
11761ME	NY	115	\$6,785
58912MM	NY	67	\$6,705
52511JZ	NY	74	\$6,695
12349JB	NY	62	\$6,680
29159ML	NY	69	\$6,670
12343MG	NY	60	\$6,345
22171MM	NY	73	\$6,205
12341MG	NY	64	\$6,200
89365MJ	NY	64	\$6,160
44141MK	NY	60	\$6,120
12121MJ	NY	63	\$6,115
86008JV	NY	57	\$6,105

22212MM	NY	58	\$6,055
86615MG	NY	66	\$6,020
18420JU	NY	60	\$6,020
67655MC	NY	58	\$6,020
62273MM	NY	64	\$6,010

4. Identify the violations by license type. Display 3 columns: license type, number of violations and total fine amount. The license type with the most violations is displayed first. Display 1 row for each distinct license type.

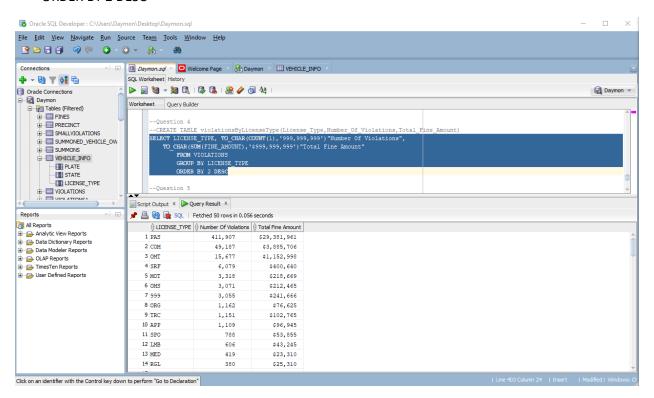
SELECT LICENSE_TYPE, TO_CHAR(COUNT(1),'999,999,999')"Number Of Violations",

TO_CHAR(SUM(FINE_AMOUNT), '\$999,999,999')"Total Fine Amount"

FROM VIOLATIONS

GROUP BY LICENSE_TYPE

ORDER BY 2 DESC



Number

	Of	Total Fine
LICENSE_TYPE	Violations	Amount
PAS	411,907	\$29,381,961
COM	49,187	\$3,885,706
OMT	15,677	\$1,152,998
SRF	6,079	\$400,640
MOT	3,318	\$218,669
OMS	3,071	\$212,465

	999	3,055	\$241,666
ORG		1,162	\$76,625
TRC		1,151	\$102,765
APP		1,109	\$96,945
SPO		788	\$53,855
LMB		606	\$43,245
MED		419	\$23,310
RGL		380	\$25,310
OMR		362	\$22,845
TRL		248	\$13,670
CMB		247	\$17,595
TOW		241	\$18,355
ITP		139	\$9,350
DLR		138	\$9,020
OML		129	\$9,770
HIS		104	\$6,900
SCL		87	\$4,465
VAS		61	\$3,885
TRA		61	\$5,190
SRN		53	\$3,395
IRP		50	\$5 <i>,</i> 770
MCL		37	\$2,560
MCD		25	\$1,715
OMV		14	\$685
SEM		12	\$590
STG		9	\$545
HAM		8	\$565
AGR		8	\$615
PHS		8	\$560
BOB		7	\$575
SPC		6	\$570
LTR		5	\$245
NLM		4	\$260
AYG		4	\$310
ARG		4	\$310
SOS		3	\$225
RGC		3	\$160
NYC		2	\$230
NYS		2	\$130
CHC		2	\$180
BOT		1	\$65
CSP		1	\$115
LUA		1	\$115

AMB	1	\$35
CMH	1	\$65
LMC	1	\$65
AGC	1	\$65

5. Identify violations by license plate state. Display 3 columns: state, number of violations and total fine amount. The state with the most violations is displayed first. Display 1 row for each distinct state.

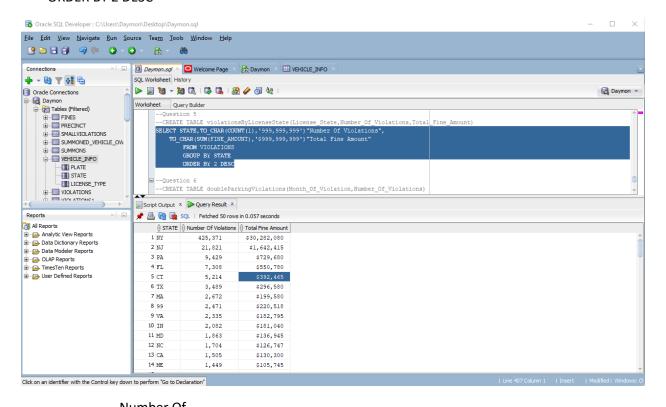
SELECT STATE, TO_CHAR(COUNT(1), '999, 999, 999') "Number Of Violations",

TO CHAR(SUM(FINE AMOUNT), '\$999,999,999') "Total Fine Amount"

FROM VIOLATIONS

GROUP BY STATE

ORDER BY 2 DESC



		Number Of	
STATE		Violations	Total Fine Amount
NY		425,371	\$30,282,080
NJ		21,821	\$1,642,415
PA		9,429	\$729,680
FL		7,308	\$550,780
CT		5,214	\$392,465
TX		3,489	\$296,580
MA		2,672	\$199,580
	99	2,471	\$220,518
VA		2,335	\$182,795

IN	2,082	\$181,040
MD	1,863	\$136,945
NC	1,704	\$136,5 4 5 \$126,747
CA	1,505	\$130,300
ME	1,449	\$105,745
IL	1,392	\$105,745
GA	1,262	\$96,435
OH	949	\$73,665
AZ	855	\$67,505
TN	759	
SC		\$55,465
MI	673	\$53,095 \$41,705
	556 471	\$41,795
WI	471 426	\$40,210
DE	436	\$33,565
RI	363	\$26,685
WA	363	\$27,950
AL	294	\$22,820
NH	281	\$20,530
OK	232	\$18,175
MN	230	\$18,055
VT	207	\$14,795
CO	190	\$14,790
MO	187	\$14,915
KY	168	\$12,835
OR	153	\$13,040
LA	135	\$10,270
ON	114	\$8,115
MS	100	\$7,175
IA	89	\$6,820
AR	88	\$6,600
WV	88	\$6,645
SD	82	\$7,355
UT	63	\$5,280
KS	59	\$4,520
NE	58	\$4,475
DC	57	\$4,500
NV	54	\$4,655
NM	43	\$3,350
DP	39	\$2,960
MT	39	\$3,290
QB	34	\$2,350
ID	26	\$2,105
WY	25	\$2,060
ND	21	\$1,535
HI	13	\$870
AK	11	\$960
AB	7	\$650
PR	5	\$350
		·

NB	5	\$375
GV	3	\$245
BC	3	\$345
FO	2	\$70
NT	2	\$160
NS	1	\$115

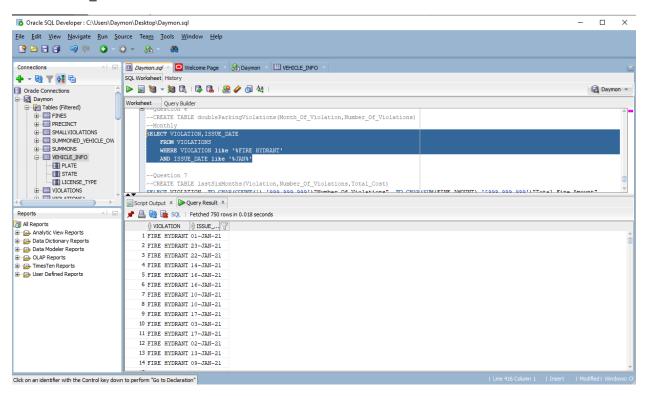
6. Identify <u>FIRE HYDRANT</u> violations by <u>JAN</u>. Display 2 columns: <u>JAN</u> and number of violations. Order by <u>JAN</u>.

SELECT VIOLATION, ISSUE_DATE

FROM VIOLATIONS

WHERE VIOLATION like '%FIRE HYDRANT'

AND ISSUE DATE like '%JAN%'



VIOLATION	ISSUE_DATE	
FIRE HYDRANT		1-Jan-21
FIRE HYDRANT		23-Jan-21
FIRE HYDRANT		22-Jan-21
FIRE HYDRANT		14-Jan-21
FIRE HYDRANT		16-Jan-21
FIRE HYDRANT		16-Jan-21
FIRE HYDRANT		10-Jan-21
FIRE HYDRANT		10-Jan-21

FIRE HYDRANT	17-Jan-21
FIRE HYDRANT	3-Jan-21
FIRE HYDRANT	17-Jan-21
FIRE HYDRANT	2-Jan-21
FIRE HYDRANT	13-Jan-21
FIRE HYDRANT	9-Jan-21
FIRE HYDRANT	22-Jan-21
FIRE HYDRANT	17-Jan-21
FIRE HYDRANT	6-Jan-21
FIRE HYDRANT	3-Jan-21
FIRE HYDRANT	7-Jan-21
FIRE HYDRANT	7-Jan-21
FIRE HYDRANT	4-Jan-21
FIRE HYDRANT	4-Jan-21
FIRE HYDRANT	5-Jan-21
FIRE HYDRANT	18-Jan-21
FIRE HYDRANT	20-Jan-21
FIRE HYDRANT	31-Jan-21
FIRE HYDRANT	4-Jan-21
FIRE HYDRANT	5-Jan-21
FIRE HYDRANT	3-Jan-21
FIRE HYDRANT	6-Jan-21
FIRE HYDRANT	7-Jan-21
FIRE HYDRANT	4-Jan-21
FIRE HYDRANT	5-Jan-21
FIRE HYDRANT	27-Jan-21
FIRE HYDRANT	7-Jan-21
FIRE HYDRANT	5-Jan-21
FIRE HYDRANT	27-Jan-21
FIRE HYDRANT	2-Jan-21
FIRE HYDRANT	5-Jan-21
FIRE HYDRANT	4-Jan-21
FIRE HYDRANT	5-Jan-21
FIRE HYDRANT	1-Jan-21
FIRE HYDRANT	4-Jan-21
FIRE HYDRANT	4-Jan-21
FIRE HYDRANT	5-Jan-21
FIRE HYDRANT	23-Jan-21
FIRE HYDRANT	5-Jan-21
FIRE HYDRANT	3-Jan-21
FIRE HYDRANT	4-Jan-21
FIRE HYDRANT	2-Jan-21
FIRE HYDRANT	4-Jan-21
FIRE HYDRANT	4-Jan-21
FIRE HYDRANT	2-Jan-21

FIRE HYDRANT	5-Jan-21
FIRE HYDRANT	6-Jan-21
FIRE HYDRANT	6-Jan-21

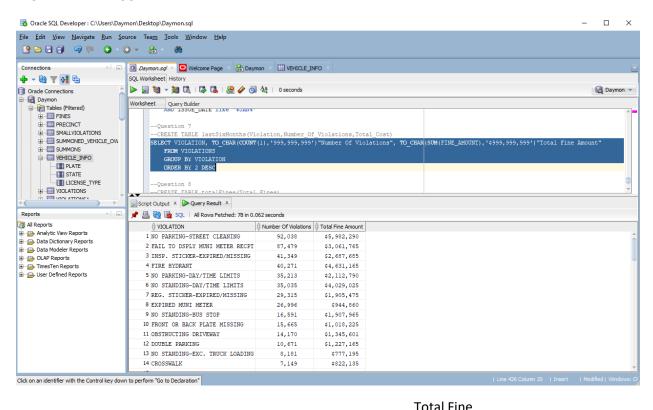
7. Identify violations for the last 6 months. Display 3 columns: violation, number of violations and total cost. The most violations will be displayed first. Display 1 row for each distinct violation.

SELECT VIOLATION, TO_CHAR(COUNT(1),'999,999,999')"Number Of Violations", TO_CHAR(SUM(FINE_AMOUNT),'\$999,999,999')"Total Fine Amount"

FROM VIOLATIONS

GROUP BY VIOLATION

ORDER BY 2 DESC



		Total Fille
VIOLATION	Number Of Violations	Amount
NO PARKING-STREET CLEANING	92,038	\$5,982,290
FAIL TO DSPLY MUNI METER RECPT	87,479	\$3,061,765
INSP. STICKER-EXPIRED/MISSING	41,349	\$2,687,685
FIRE HYDRANT	40,271	\$4,631,165
NO PARKING-DAY/TIME LIMITS	35,213	\$2,112,790
NO STANDING-DAY/TIME LIMITS	35,035	\$4,029,025
REG. STICKER-EXPIRED/MISSING	29,315	\$1,905,475
EXPIRED MUNI METER	26,996	\$944,860

NO STANDING-BUS STOP	16,591	\$1,907,965
FRONT OR BACK PLATE MISSING	15,665	\$1,018,225
OBSTRUCTING DRIVEWAY	14,170	\$1,345,601
DOUBLE PARKING	10,671	\$1,227,165
NO STANDING-EXC. TRUCK LOADING	8,181	\$777,195
CROSSWALK	7,149	\$822,135
NGHT PKG ON RESID STR-COMM VEH	5,511	\$358,215
SIDEWALK	4,623	\$531,386
NO STANDING-EXC. AUTH. VEHICLE	3,729	\$354,255
NO STANDING-COMM METER ZONE	2,900	\$333,500
BIKE LANE	1,822	\$209,510
SAFETY ZONE	1,534	\$176,210
STORAGE-3HR COMMERCIAL	1,453	\$94,445
WRONG WAY	1,355	\$60,975
PLTFRM LFTS LWRD POS COMM VEH	1,222	\$54,990
DETACHED TRAILER	1,173	\$52,780
INSP STICKER-MUTILATED/C'FEIT	1,161	\$75,465
NON-COMPLIANCE W/ POSTED SIGN	1,116	\$66,960
NO MATCH-PLATE/STICKER	1,092	\$70,977
NIGHTTIME STD/ PKG IN A PARK	1,090	\$103,488
PEDESTRIAN RAMP	1,025	\$169,095
COMML PLATES-UNALTERED VEHICLE	1,011	\$116,265
NO STANDING-TAXI STAND	898	\$103,270
NO STOPPING-DAY/TIME LIMITS	852	\$97,873
ANGLE PARKING	666	\$29,970
OTHER	637	\$48,895
NO STANDING-BUS LANE	525	\$60,375
OVERNIGHT TRACTOR TRAILER PKG	465	\$120,250
FAIL TO DISP. MUNI METER RECPT	464	\$16,240
BEYOND MARKED SPACE	372	\$16,797
NO PARKING-EXC. HOTEL LOADING	308	\$35,370
NO PARKING-EXC. HNDICAP PERMIT	296	\$53,280
FEEDING METER	281	\$18,265
REG STICKER-MUTILATED/C'FEIT	263	\$17,095
PARKED BUS-EXC. DESIG. AREA	239	\$10,755
TRAFFIC LANE	202	\$23,230
IMPROPER REGISTRATION	181	\$11,765
NO PARKING-EXC. AUTH. VEHICLE	146	\$8,760
MISSING EQUIPMENT	139	\$6,255
DIVIDED HIGHWAY	136	\$15,640
VEHICLE FOR SALE(DEALERS ONLY)	133	\$5,985
NO STANDING-COMMUTER VAN STOP	128	\$14,720
VIN OBSCURED	110	\$7,145
		, ,- :-

INTERSECTION	94	\$10,810
OVERTIME PKG-TIME LIMIT POSTED	89	\$5,320
OBSTRUCTING TRAFFIC/INTERSECT	72	\$8,240
NO STANDING-HOTEL LOADING	59	\$6,785
	49	\$1,540
NO STANDING-FOR HIRE VEH STOP	47	\$5,405
EXPIRED MUNI MTR-COMM MTR ZN	43	\$1,505
UNAUTHORIZED BUS LAYOVER	35	\$4,025
EXCAVATION-VEHICLE OBSTR TRAFF	26	\$2,440
IDLING	22	\$2,530
RAILROAD CROSSING	17	\$1,529
UNALTERED COMM VEHICLE	14	\$910
WASH/REPAIR VEHCL-REPAIR ONLY	7	\$315
VEH-SALE/WSHNG/RPRNG/DRIVEWAY	7	\$175
OVERTIME STDG D/S	7	\$434
VACANT LOT	6	\$270
SELLING/OFFERING MCHNDSE-METER	5	\$175
ANGLE PARKING-COMM VEHICLE	5	\$575
BUS PARKING IN LOWER MANHATTAN	4	\$420
NO STANDING EXCP D/S	3	\$225
NO PARKING-TAXI STAND	2	\$120
PKG IN EXC. OF LIM-COMM MTR ZN	1	\$35
NO STANDING-OFF-STREET LOT	1	\$115
BUS LANE VIOLATION	1	\$115
EXPIRED METER-COMM METER ZONE	1	\$35
NO STANDING-SNOW EMERGENCY	1	\$115
EXPIRED METER	1	\$35

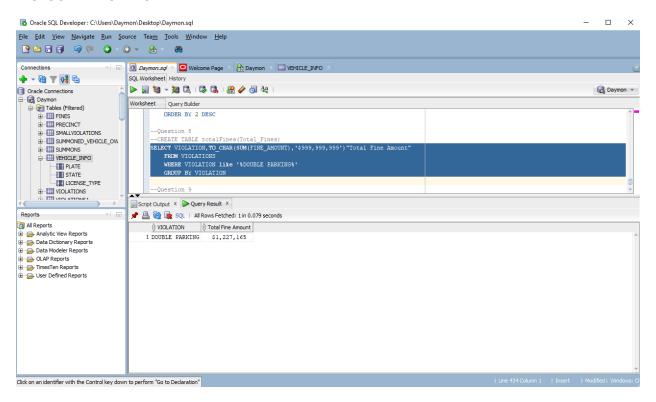
8. Identify total fines for double parking. Display the total fines.

SELECT VIOLATION,TO_CHAR(SUM(FINE_AMOUNT),'\$999,999,999')"Total Fine Amount"

FROM VIOLATIONS

WHERE VIOLATION like '%DOUBLE PARKING%'

GROUP BY VIOLATION



VIOLATION Total Fine Amount

DOUBLE PARKING \$1,227,165

9. Perform an analysis of your own choosing.

Identify the violations with keyword "parking" in OCTOBER. DISPLAY two columns: the Violation and number of violations.

SELECT VIOLATION, TO_CHAR(COUNT(1),'999,999,999')"Number Of Violations"

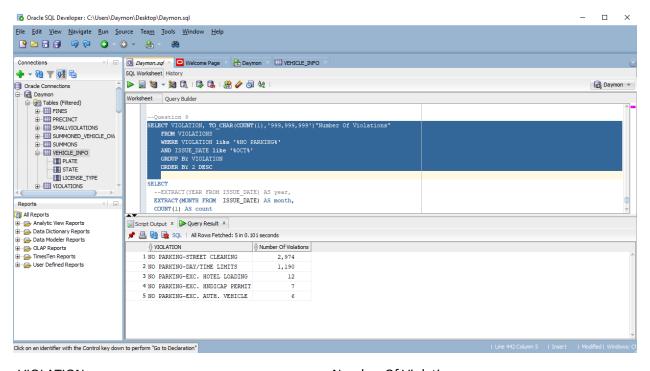
FROM VIOLATIONS

WHERE VIOLATION like '%NO PARKING%'

AND ISSUE_DATE like '%OCT%'

GROUP BY VIOLATION

ORDER BY 2 DESC



VIOLATION	Number Of Violations
NO PARKING-STREET CLEANING	2,974
NO PARKING-DAY/TIME LIMITS	1,190
NO PARKING-EXC. HOTEL LOADING	12
NO PARKING-EXC. HNDICAP PERMIT	7
NO PARKING-EXC. AUTH. VEHICLE	6

10. Display the structure of ALL tables using SQL Describe.

TABLE 1: SUMMONED_VECHICLE_OWNER

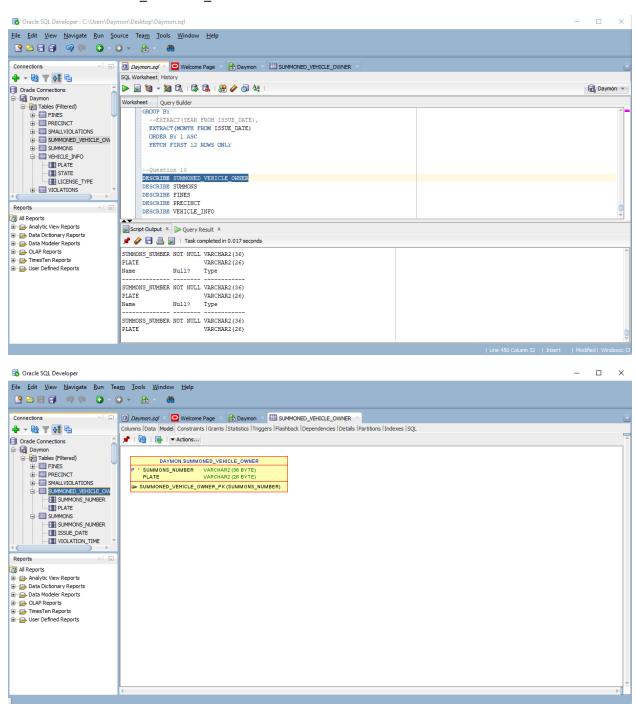


TABLE 2: SUMMONS

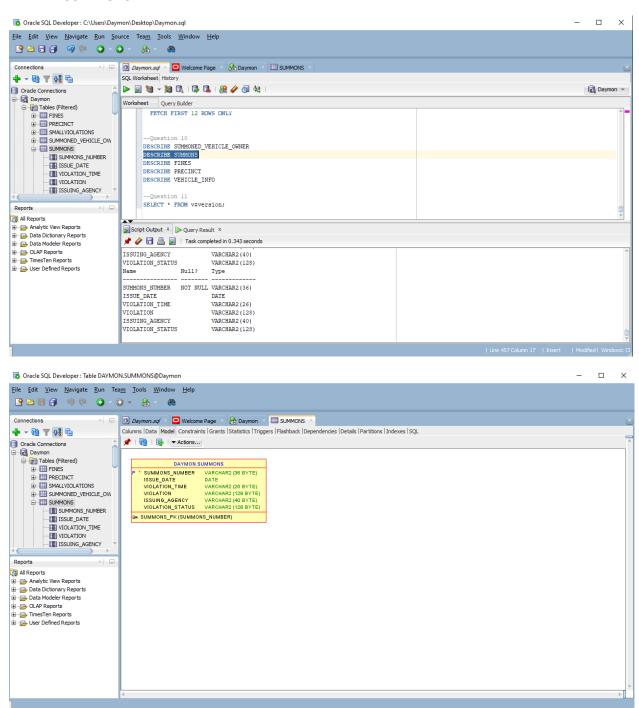


TABLE 3:FINES

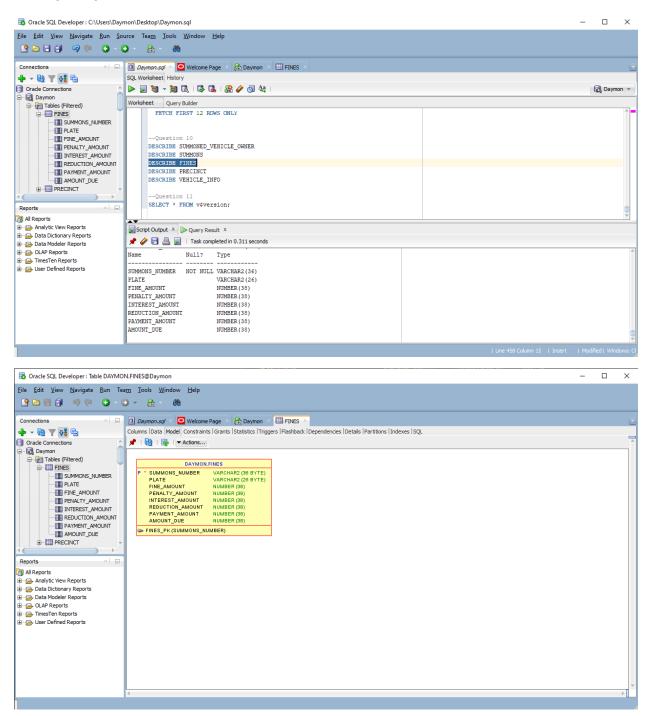


TABLE 4:PRECINCT

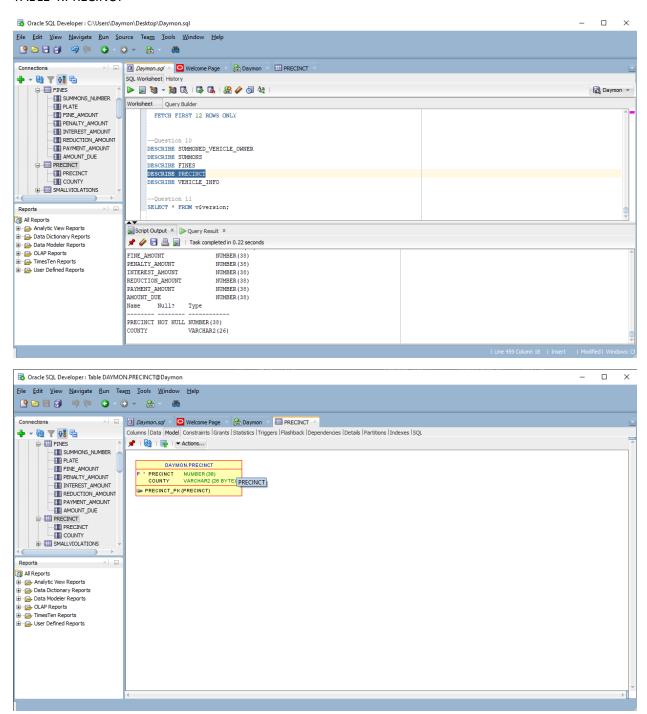
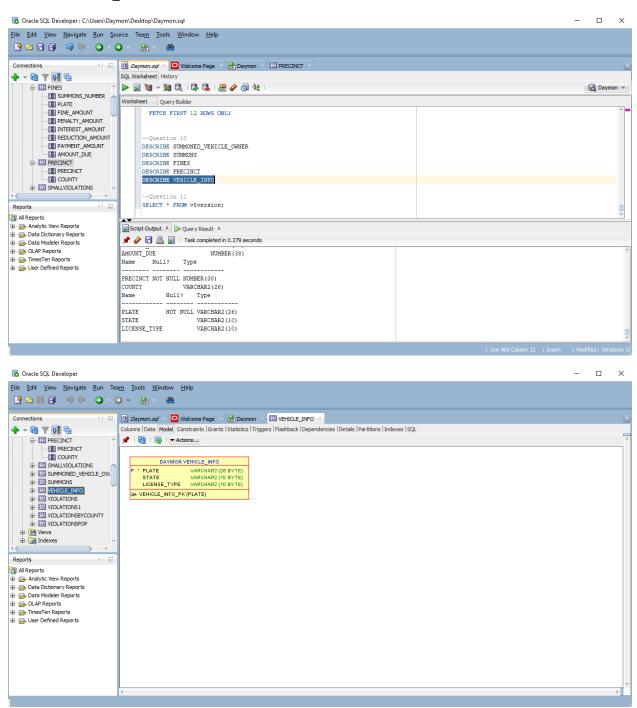
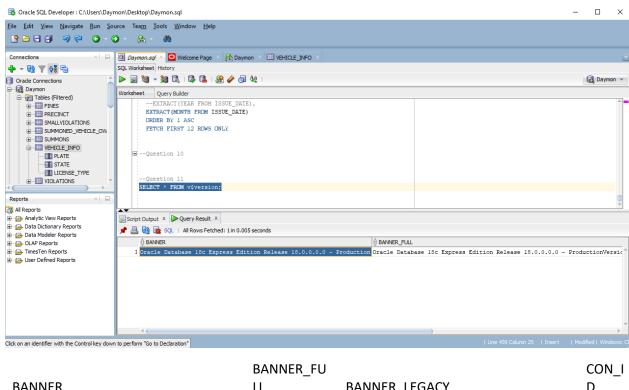


TABLE 5: VEHICLE INFO



11. Display the version of Oracle. Enter:



	DAININER_FU		CON_I
BANNER	LL	BANNER_LEGACY	D
	Oracle		
	Database		
	18c Express		
	Edition		
	Release		
	18.0.0.0.0 -		
	Production		
Oracle Database 18c Express Edition	Version	Oracle Database 18c Express Edition	
Release 18.0.0.0.0 - Production	18.4.0.0.0	Release 18.0.0.0.0 - Production	0