WORKSHEET 3

Student Name: Vivek Kumar **UID:** 21BCS8129
DOMAIN CAMP: 16-01-2023 to 28-01-2023 **Section/Group:** DWWC-77
Subject Name: Database Management System

Using the following table schema ord_no purch_amt

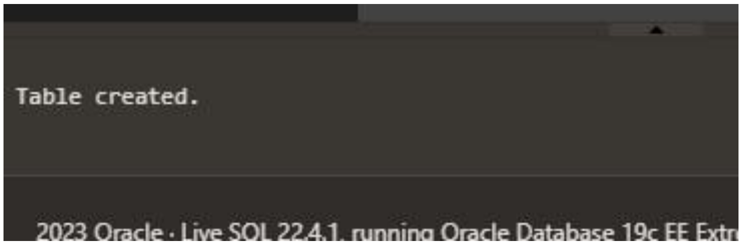
```
ord_date    customer_id  salesman_id

----------  ----------  ----------  -----------  ----------- 70001
150.5       2012-10-05  3005        5002
70009       270.65      2012-09-10  3001        5005
70002       65.26       2012-10-05  3002        5001
70004       110.5       2012-08-17  3009        5003
70007       948.5       2012-09-10  3005        5002
70005       2400.6      2012-07-27  3007        5001
70008       5760        2012-09-10  3002        5001
70010       1983.43     2012-10-10  3004        5006
70003       2480.4      2012-10-10  3009        5003
70012       250.45      2012-06-27  3008        5002
70011       75.29       2012-08-17  3003        5007
70013       3045.6      2012-04-25  3002        5001
```

Ques 1 Write a SQL statement to find the total purchase amount of all orders.

Ques 2 Write a SQL statement to find the average purchase amount of all orders.

Ques 3 Write a SQL statement to find the number of salesmen currently listing for all of their customers.

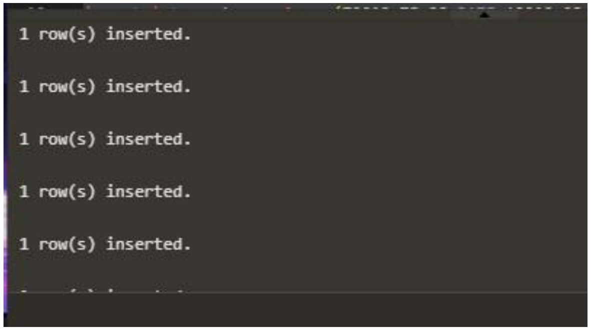
Solution: create table orders(ord_no number, purch_amt number(6,2),ord_date date, customer_id number, salesman_id number);



```
Table created.
```

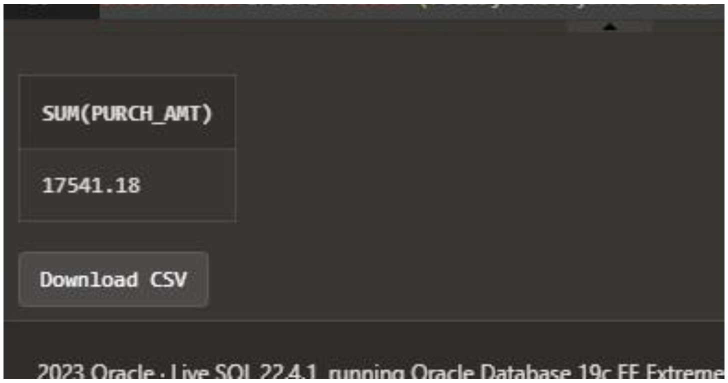
2023 Oracle · Live SQL 22.4.1, running Oracle Database 19c EE Extr

insert into orders values (70001,150.5,DATE '2012-10-05',3005,5002);
insert into orders values (70009,270.65,DATE '2012-09-10',3001,5005);
insert into orders values (70002,65.26,DATE '2012-10-05',3002,5001); insert
into orders values (70004,110.5,DATE '2012-08-17',3009,5003); insert into
orders values (70007,948.5,DATE '2012-09-10',3005,5002); insert into
orders values (70005,2400.6,DATE '2012-07-27',3007,5001); insert into
orders values (70008,5760, DATE '2012-09-10',3002,5001); insert into
orders values (70010,1983.43,DATE '2012-10-10',3004,5006); insert into
orders values (70003,2480.4,DATE '2012-10-10',3009,5003); insert into
orders values (70012,250.45,DATE '2012-06-27',3008,5002); insert into
orders values (70012,75.29,DATE '2012-08-17',3003,5007); insert into
orders values (70013,3045.6,DATE '2012-04-25',3002,5001);



```
1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.
```

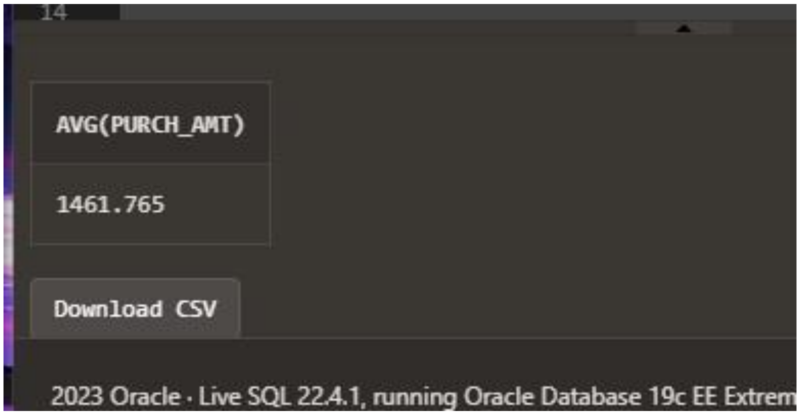
Select sum(purch_amt) from orders;



```
SUM(PURCH_AMT)
17541.18
```

2023 Oracle · Live SQL 22.4.1 running Oracle Database 19c EE Extreme

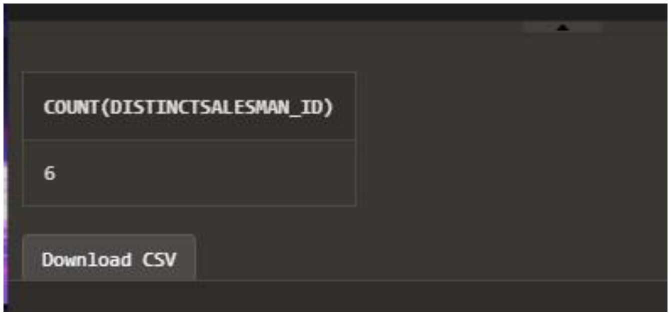
select avg(purch_amt) from orders;



AVG(PURCH_AMT)
1461.765

2023 Oracle · Live SQL 22.4.1, running Oracle Database 19c EE Extrem

Select count(distinct salesman_id) from orders;



COUNT(DISTINCTSALESMAN_ID)
6

Using the criteria given below customer_id | cust_name | city | grade | salesman_id -------------+----------------+------------+-------+------------- 3002 | Nick Rimando | New York | 100 | 5001

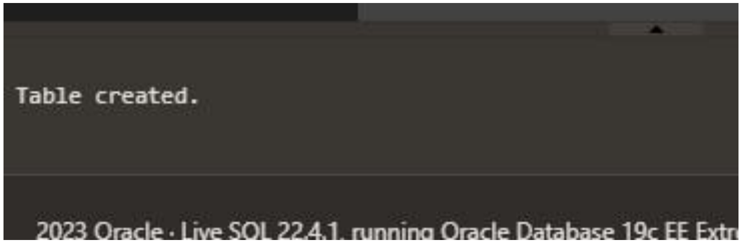
3007 | Brad Davis | New York | 200 | 5001
3005 | Graham Zusi | California | 200 | 5002
3008 | Julian Green | London | 300 | 5002
3004 | Fabian Johnson | Paris | 300 | 5006
3009 | Geoff Cameron | Berlin | 100 | 5003
3003 | Jozy Altidor | Moscow | 200 | 5007
3001 | Brad Guzan | London | | 5005

Ques 4 Write a SQL statement to know how many customers have listed their names.

Ques 5 Write a SQL statement to find the number of customers who gets at least a gradation for his/her performance.

Solution:

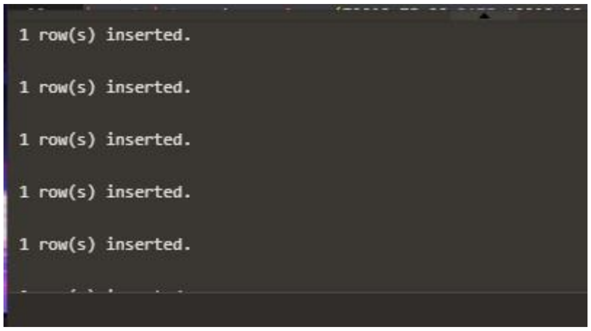
Create table customers (customer_id number, cust_name varchar(20), city varchar(20), grade number, salesman_id number);



```
Table created.
```

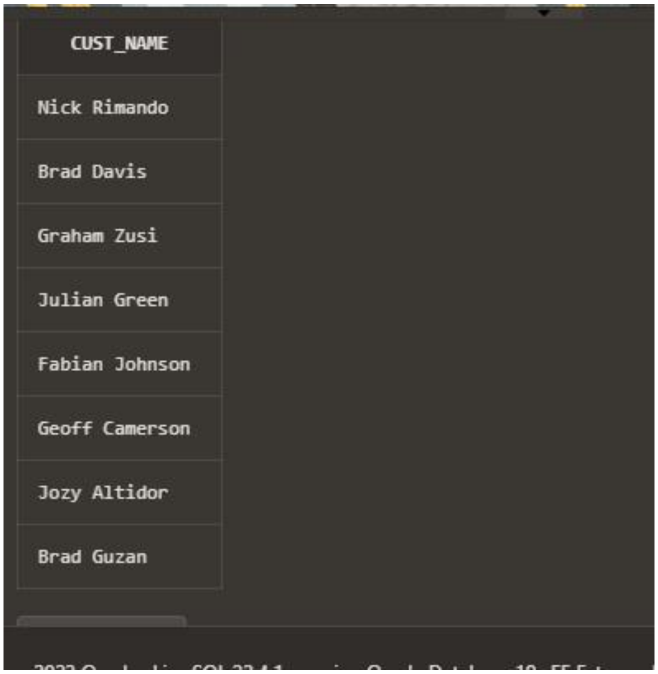
2023 Oracle · Live SQL 22.4.1, running Oracle Database 19c EE Extr

insert into customers values(3002,'Nick Rimando ', 'New York',100,5001); insert into customers values(3007,'Brad Davis ', 'New York',200,5001); insert into customers values(3005,'Graham Zusi ', 'California',200,5002); insert into customers values(3008,'Julian Green ', 'London',300,5002); insert into customers values(3004,'Fabian Johnson ', 'Paris',300,5006); insert into customers values(3009,'Geoff Camerson ', 'Berlin',100,5003); insert into customers values(3003,'Jozy Altidor', 'Moscow',200,5007); insert into customers values(3001,'Brad Guzan ', 'London', null,5005);



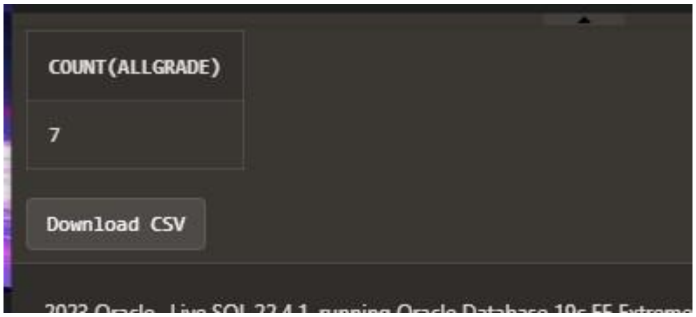
```
1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.
```

select cust_name from customers;



CUST_NAME
Nick Rimando
Brad Davis
Graham Zusi
Julian Green
Fabian Johnson
Geoff Camerson
Jozy Altidor
Brad Guzan

select count(all grade) from customers;



COUNT(ALLGRADE)
7

2023 Oracle · Live SQL 22.4.1 running Oracle Database 19c EE Extreme

Use the following schema for solving questions

```
ord_no      purch_amt   ord_date    customer_id  salesman_id
----------  ----------  ----------  -----------  ----------- 70001
150.5       2012-10-05  3005        5002
70009       270.65      2012-09-10  3001        5005
70002       65.26       2012-10-05  3002        5001
70004       110.5       2012-08-17  3009        5003
70007       948.5       2012-09-10  3005        5002
70005       2400.6      2012-07-27  3007        5001
70008       5760        2012-09-10  3002        5001
70010       1983.43     2012-10-10  3004        5006
70003       2480.4      2012-10-10  3009        5003
```

70012	250.45	2012-06-27	3008	5002
70011	75.29	2012-08-17	3003	5007
70013	3045.6	2012-04-25	3002	5001

Ques 6 Write a SQL statement to get the maximum purchase amount of all the orders.

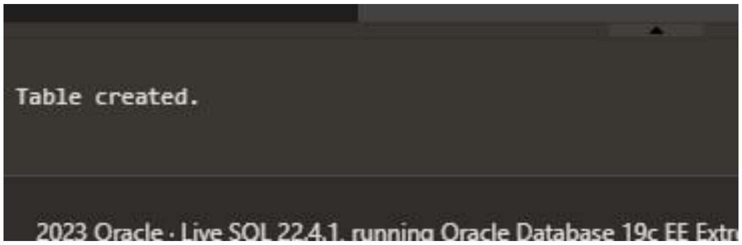
Ques 7 Write a SQL statement to get the minimum purchase amount of all the orders.

Ques 8 Write a SQL statement to find the highest purchase amount ordered by each customer with their ID and highest purchase amount.

Ques 9 Write a SQL statement to find the highest purchase amount ordered by each customer on a particular date with their ID, order date and highest purchase amount.

Ques 10 Write a SQL statement to find the highest purchase amount on a date '2012-0817' for each salesman with their ID.

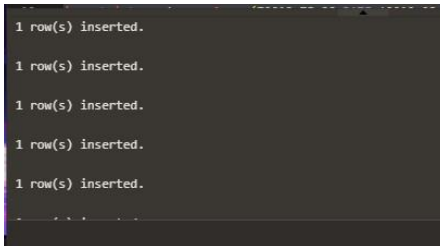
Solution: create table orders(ord_no number, purch_amt number(6,2),ord_date date, customer_id number, salesman_id number);



```
Table created.
```

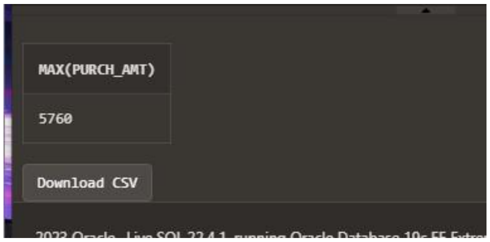
2023 Oracle · Live SQL 22.4.1, running Oracle Database 19c EE Extr

```
insert into orders values (70001,150.5,DATE '2012-10-05',3005,5002); insert
into orders values (70009,270.65,DATE '2012-09-10',3001,5005); insert into
orders values (70002,65.26,DATE '2012-10-05',3002,5001); insert into
orders values (70004,110.5,DATE '2012-08-17',3009,5003); insert into
orders values (70007,948.5,DATE '2012-09-10',3005,5002); insert into
orders values (70005,2400.6,DATE '2012-07-27',3007,5001); insert into
orders values (70008,5760,  DATE '2012-09-10',3002,5001); insert into
orders values (70010,1983.43,DATE '2012-10-10',3004,5006); insert into
orders values (70003,2480.4,DATE '2012-10-10',3009,5003); insert into
orders values (70012,250.45,DATE '2012-06-27',3008,5002); insert into
orders values (70012,75.29,DATE '2012-08-17',3003,5007); insert into
orders values (70013,3045.6,DATE '2012-04-25',3002,5001);
```



```
1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.
```

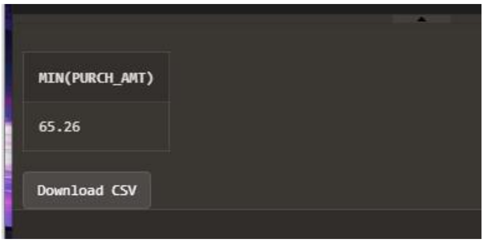
select max(purch_amt) from orders;



MAX(PURCH_AMT)
5760

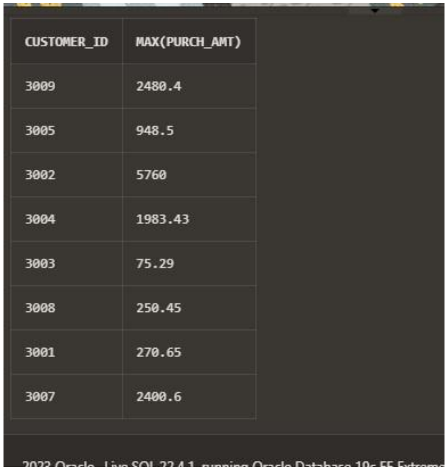
2023 Oracle · Live SQL 22.4.1, running Oracle Database 19c EE Extre

select min(purch_amt) from orders;



MIN(PURCH_AMT)
65.26

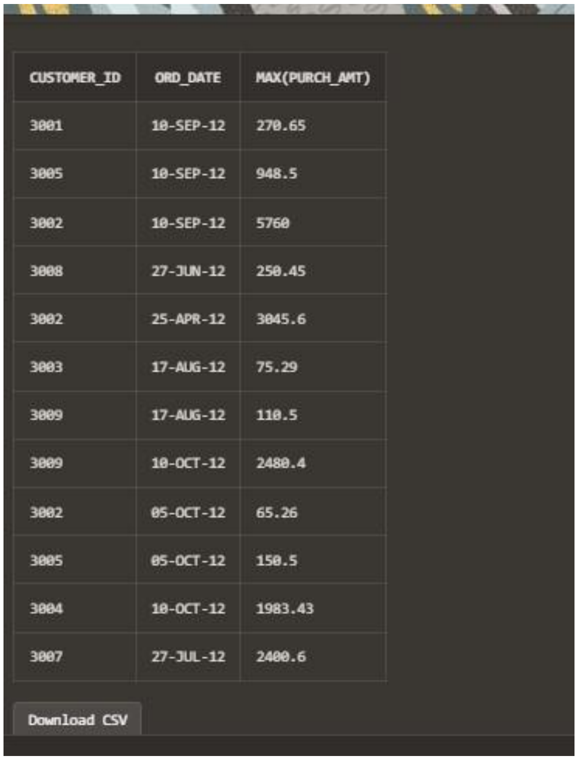
select customer_id, max(purch_amt) from orders group by customer_id;



CUSTOMER_ID	MAX(PURCH_AMT)
3009	2480.4
3005	948.5
3002	5760
3004	1983.43
3003	75.29
3008	250.45
3001	270.65
3007	2400.6

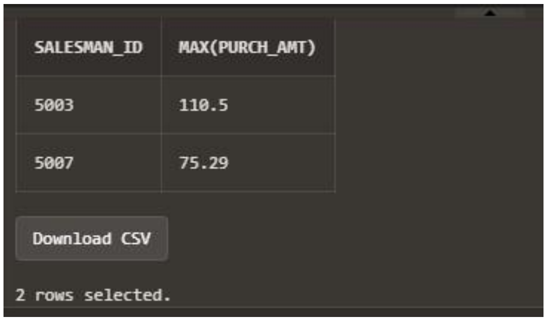
2023 Oracle · Live SQL 22.4.1, running Oracle Database 19c EE Extreme

select customer_id, ord_date, max(purch_amt) from orders group by customer_id, ord_date;



CUSTOMER_ID	ORD_DATE	MAX(PURCH_AMT)
3001	10-SEP-12	270.65
3005	10-SEP-12	948.5
3002	10-SEP-12	5760
3008	27-JUN-12	250.45
3002	25-APR-12	3045.6
3003	17-AUG-12	75.29
3009	17-AUG-12	110.5
3009	10-OCT-12	2480.4
3002	05-OCT-12	65.26
3005	05-OCT-12	150.5
3004	10-OCT-12	1983.43
3007	27-JUL-12	2400.6

select salesman_id, max(purch_amt) from orders where ord_date=DATE '2012-08-17' group by salesman_id;



SALESMAN_ID	MAX(PURCH_AMT)
5003	110.5
5007	75.29

2 rows selected.

Use the following schema customer_id | cust_name | city | grade | salesman_id -------------+----------------+------------+-------+------------- 3002 | Nick Rimando | New York | 100 | 5001

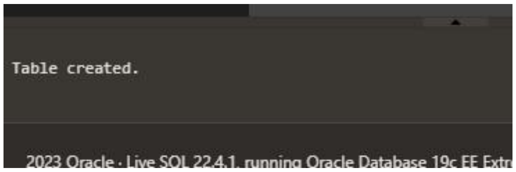
3007 | Brad Davis | New York | 200 | 5001
3005 | Graham Zusi | California | 200 | 5002
3008 | Julian Green | London | 300 | 5002
3004 | Fabian Johnson | Paris | 300 | 5006
3009 | Geoff Cameron | Berlin | 100 | 5003

```
3003 | Jozy Altidor   | Moscow     |   200 |       5007
3001 | Brad Guzan     | London     |       |       5005
```

Ques 11 Write a SQL statement which selects the highest grade for each of the cities of the customers.

Solution:

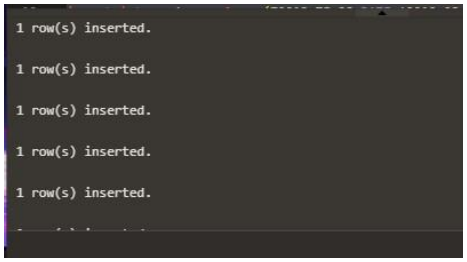
Create table customers (customer_id number, cust_name varchar(20), city varchar(20), grade number, salesman_id number);



```
Table created.
```

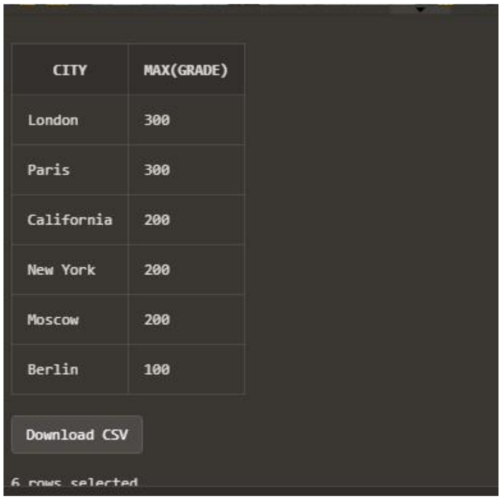
2023 Oracle · Live SQL 22.4.1, running Oracle Database 19c EE Extr

insert into customers values(3002,'Nick Rimando ', 'New York',100,5001);
insert into customers values(3007,'Brad Davis ', 'New York',200,5001);
insert into customers values(3005,'Graham Zusi ', 'California',200,5002);
insert into customers values(3008,'Julian Green ', 'London',300,5002); insert into customers values(3004,'Fabian Johnson ', 'Paris',300,5006); insert into customers values(3009,'Geoff Camerson ', 'Berlin',100,5003); insert into customers values(3003,'Jozy Altidor', 'Moscow',200,5007); insert into customers values(3001,'Brad Guzan ', 'London', null,5005);



```
1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.
```

select city, max(grade) from customers group by city;



CITY	MAX(GRADE)
London	300
Paris	300
California	200
New York	200
Moscow	200
Berlin	100

6 rows selected

Use the following schema for following questions

```
 EMPLOYEE_ID | FIRST_NAME  | LAST_NAME   | EMAIL    | PHONE_NUMBER       |
HIRE_DATE  | JOB_ID     | SALARY   | COMMISSION_PCT | MANAGER_ID |
DEPARTMENT_ID |
+-------------+-------------+-------------+----------+--------------------+------------+------------+---------
+----------------+------------+---------------+
|         100 | Steven      | King        | SKING    | 515.123.4567       | 1987-06-17 | AD_PRES    |
24000.00 |           0.00 |          0 |            90 |
|         101 | Neena       | Kochhar     | NKOCHHAR | 515.123.4568       | 1987-06-18 |
AD_VP      | 17000.00 |           0.00 |        100 |            90 |
|         102 | Lex         | De Haan     | LDEHAAN  | 515.123.4569       | 1987-06-19 | AD_VP      |
17000.00 |           0.00 |        100 |            90 |
|         103 | Alexander   | Hunold      | AHUNOLD  | 590.423.4567       | 1987-06-20 |
IT_PROG    |  9000.00 |           0.00 |        102 |            60 |
|         104 | Bruce       | Ernst       | BERNST   | 590.423.4568       | 1987-06-21 |
IT_PROG    |  6000.00 |           0.00 |        103 |            60 |
|         105 | David       | Austin      | DAUSTIN  | 590.423.4569       | 1987-06-22 |
IT_PROG    |  4800.00 |           0.00 |        103 |            60 |
|         106 | Valli       | Pataballa   | VPATABAL | 590.423.4560       | 1987-06-23 |
IT_PROG    |  4800.00 |           0.00 |        103 |            60 |
|         107 | Diana       | Lorentz     | DLORENTZ | 590.423.5567       | 1987-06-24 |
IT_PROG    |  4200.00 |           0.00 |        103 |            60 |
|         108 | Nancy       | Greenberg   | NGREENBE | 515.124.4569       | 1987-06-25 |
FI_MGR     | 12000.00 |           0.00 |        101 |            100 |
|          109 | Daniel       | Faviet       | DFAVIET  | 515.124.4169       | 1987-06-26 | FI_ACCOUNT
|  9000.00 |           0.00 |        108 |            100 |
|          110 | John         | Chen         | JCHEN    | 515.124.4269       | 1987-06-27 | FI_ACCOUNT |
8200.00 |           0.00 |        108 |            100 |
|          111 | Ismael       | Sciarra      | ISCIARRA | 515.124.4369       | 1987-06-28 | FI_ACCOUNT
|  7700.00 |           0.00 |        108 |            100 |
|          112 | Jose Manuel | Urman        | JMURMAN  | 515.124.4469       | 1987-06-29 |
FI_ACCOUNT |  7800.00 |           0.00 |        108 |            100 |
|          113 | Luis         | Popp         | LPOPP    | 515.124.4567       | 1987-06-30 | FI_ACCOUNT |
6900.00 |           0.00 |        108 |            100 |
|          114 | Den          | Raphaely     | DRAPHEAL | 515.127.4561       | 1987-07-01 |
PU_MAN     | 11000.00 |           0.00 |        100 |             30 |
|          115 | Alexander    | Khoo         | AKHOO    | 515.127.4562       | 1987-07-02 |
PU_CLERK   |  3100.00 |           0.00 |        114 |             30 |
|          116 | Shelli       | Baida        | SBAIDA   | 515.127.4563       | 1987-07-03 |
PU_CLERK   |  2900.00 |           0.00 |        114 |             30 |
```

Ques 12 Write a query to list the number of jobs available in the employees table.

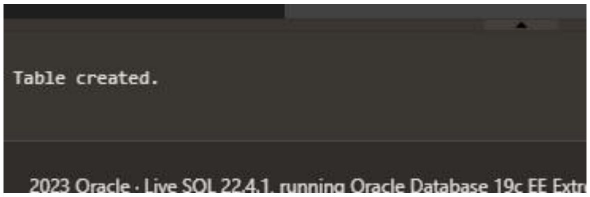
Ques 13 Write a query to get the total salaries payable to employees

Ques 14 Write a query to get the minimum salary from the employees table.

Ques 15 Write a query to get the maximum salary of an employee working as a Programmer.

Solution:

Create table employees (employee_id number, first_name varchar(30), last_name varchar(30), email varchar(35), phone_number varchar(30), hire_date date, job_id varchar(10), salary float, commission_pct float, manager_id number, department_id number(10));

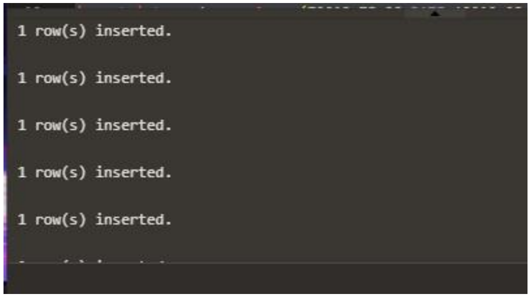


```
Table created.
```

2023 Oracle · Live SQL 22.4.1, running Oracle Database 19c EE Extr

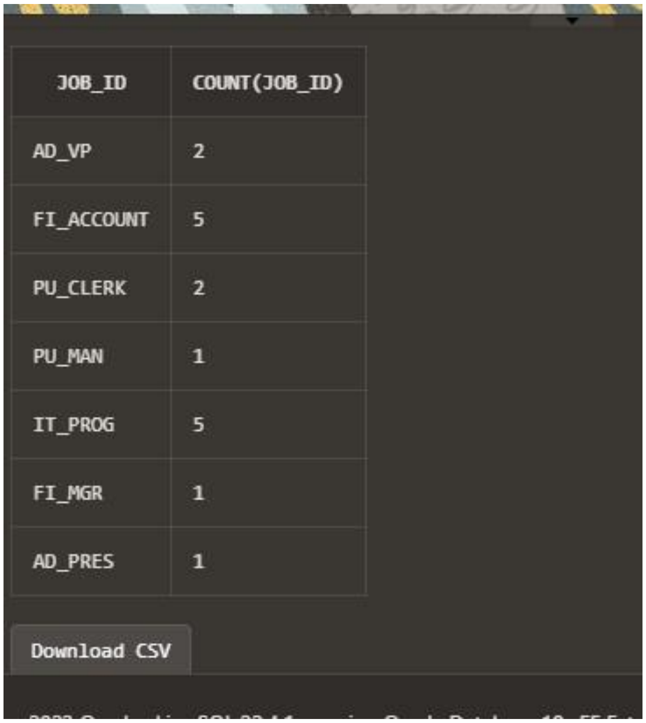
insert into employees values(100,'Steven','King','SKING','515.123.4567', to_date('17-06-1987', 'DD-MM-YYYY'), 'AD_PRES',24000.00,0.00,0,90);

```
insert into employees values(101,'Neena','Kochhar','NKOCHHAR','515.123.4568', to_date('18-06-1987', 'DD-MMYYYY'),'AD_VP',17000.00,0.00,100,90);
insert into employees  values(102,'Lex','De Haan','LDEHAAN','515.123.4569', to_date('19-06-1987', 'DD-MMYYYY'),'AD_VP',17000.00,0.00,100,90);
insert into employees values(103,'Alexander','Hunold','AHUNOLD','590.423.4567', to_date('20-06-1987', 'DD-MMYYYY'),'IT_PROG',9000.00,0.00,102,60);
insert into employees  values(104,'Bruce','Ernst','BERNST','590.423.4568', to_date('21-06-1987', 'DD-MMYYYY'),'IT_PROG',6000.00,0.00,103,60);
insert into employees values(105,'David','Austin','DAUSTIN','590.423.4569', to_date('22-06-1987', 'DD-MMYYYY'),'IT_PROG',4800.00,0.00,103,60);
insert into employees values(106,'Valli','Pataballa','VPATABAL','590.423.4560', to_date('23-06-1987', 'DD-MMYYYY'),'IT_PROG',4800.00,0.00,103,60);
insert into employees values(107,'Diana','Lorentz','DLORENTZ','590.423.5567', to_date('24-06-1987', 'DD-MMYYYY'),'IT_PROG',4200.00,0.00,103,60);
insert into employees values(108,'Nancy','Greenberg','NGREENBE','515.124.4569', to_date('25-06-1987', 'DD-MMYYYY'),'FI_MGR',12000.00,0.00,101,100);
insert into employees  values(109,'Daniel','Faviet','DFAVIET','515.124.4169', to_date('26-06-1987', 'DD-MMYYYY'),'FI_ACCOUNT',9000.00,0.00,108,100);
insert into employees values(110,'John','Chen','JCHEN','515.124.4269', to_date('27-06-1987', 'DD-MMYYYY'),'FI_ACCOUNT',8200.00,0.00,108,100);
insert into employees  values(111,'Ismael','Sciarra','ISCIARRA','515.124.4369', to_date('28-06-1987', 'DD-MMYYYY'),'FI_ACCOUNT',7700.00,0.00,108,100);
insert into employees  values(112,'Jose Manuel','Urman','JMURMAN','515.124.4469', to_date('29-06-1987', 'DD-MMYYYY'),'FI_ACCOUNT',7800.00,0.00,108,100);
insert into employees  values(113,'Luis','Popp','LPOPP','515.124.4567', to_date('30-06-1987', 'DD-MMYYYY'),'FI_ACCOUNT',6900.00,0.00,108,100);
insert into employees values(114,'Den','Raphaely','DRAPHEAL','515.127.4561', to_date('01-07-1987', 'DD-MMYYYY'),'PU_MAN',11000.00,0.00,100,30);
insert into employees values(115,'Alexander','Khoo','AKHOO','515.127.4562', to_date('02-07-1987', 'DD-MMYYYY'),'PU_CLERK',3100.00,0.00,114,30);
insert into employees values(116,'Shelli','Baida','SBAIDA','515.127.4563', to_date('03-07-1987', 'DD-MMYYYY'),'PU_CLERK',2900.00,0.00,114,30);
```



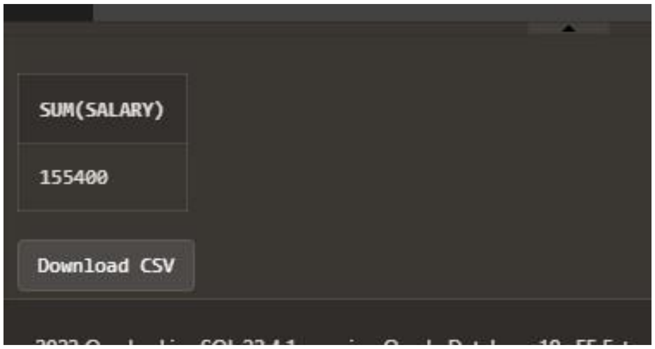
```
1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.
```

```
select job_id, count(job_id)from employees group by job_id;
```



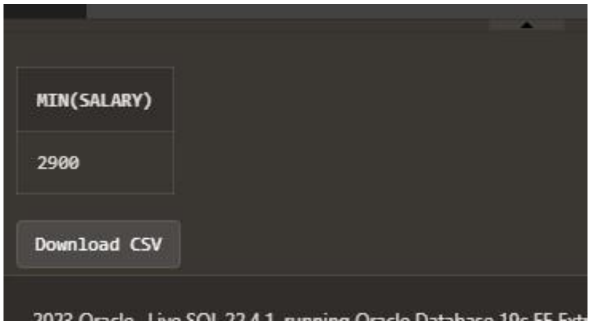
JOB_ID	COUNT(JOB_ID)
AD_VP	2
FI_ACCOUNT	5
PU_CLERK	2
PU_MAN	1
IT_PROG	5
FI_MGR	1
AD_PRES	1

select sum(salary) from employees;



SUM(SALARY)
155400

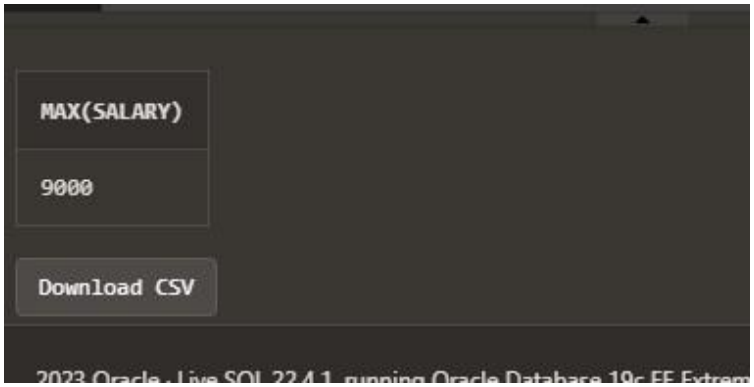
select min(salary) from employees;



MIN(SALARY)
2900

2023 Oracle . Live SQL 22.4.1, running Oracle Database 19c EE Ext

select max(salary) from employees where job_id='IT_PROG';



MAX(SALARY)
9000

2023 Oracle · Live SQL 22.4.1, running Oracle Database 19c EE Extrem