Assignment 6

Name – Tanmay Garg

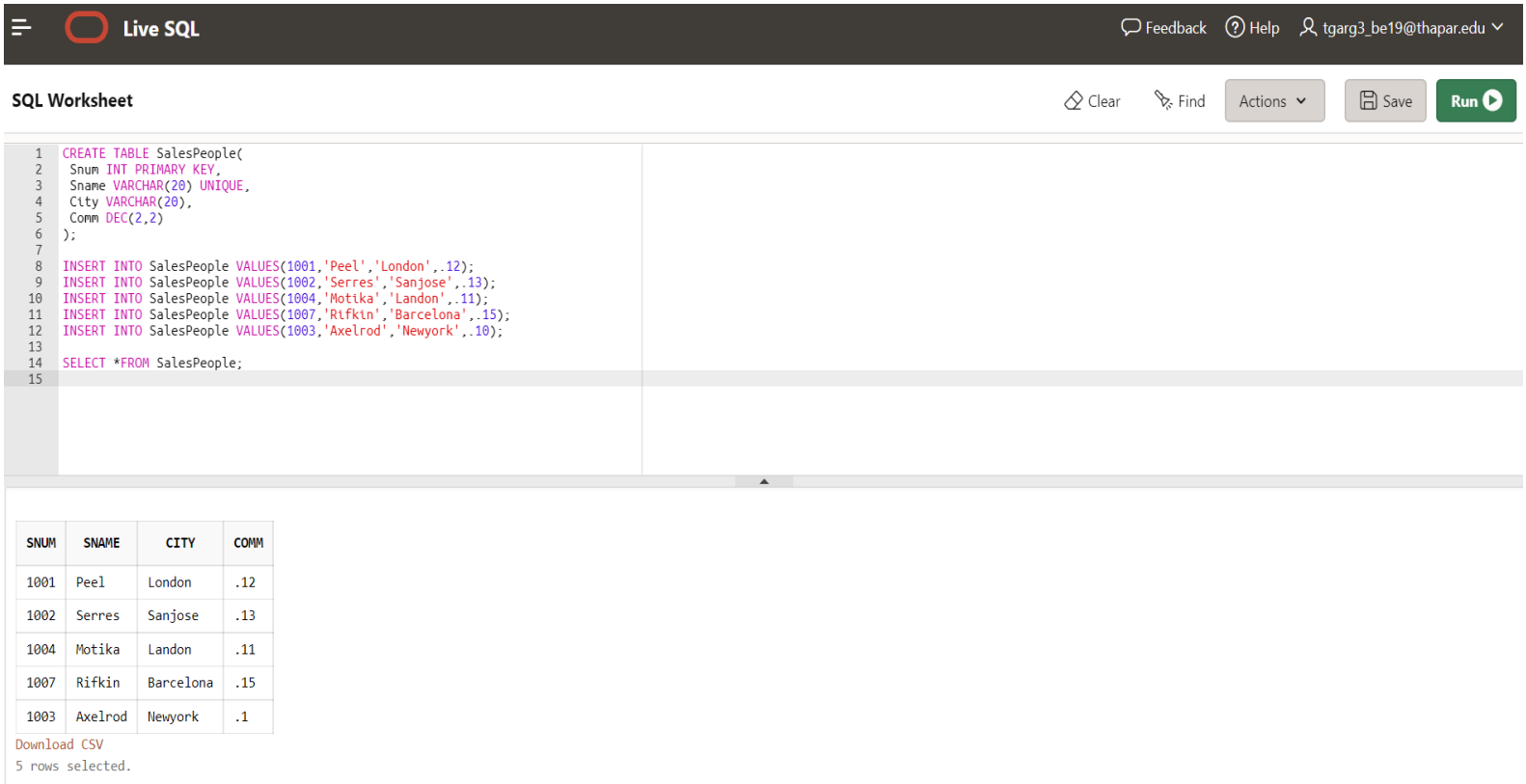
Batch – 3ENC1

Roll No. – 101915001

Table 1: SalesPeople

Snum is Primary key

Sname is Unique constraint



SNUM	SNAME	CITY	COMM
1001	Peel	London	.12
1002	Serres	Sanjose	.13
1004	Motika	Landon	.11
1007	Rifkin	Barcelona	.15
1003	Axelrod	Newyork	.1

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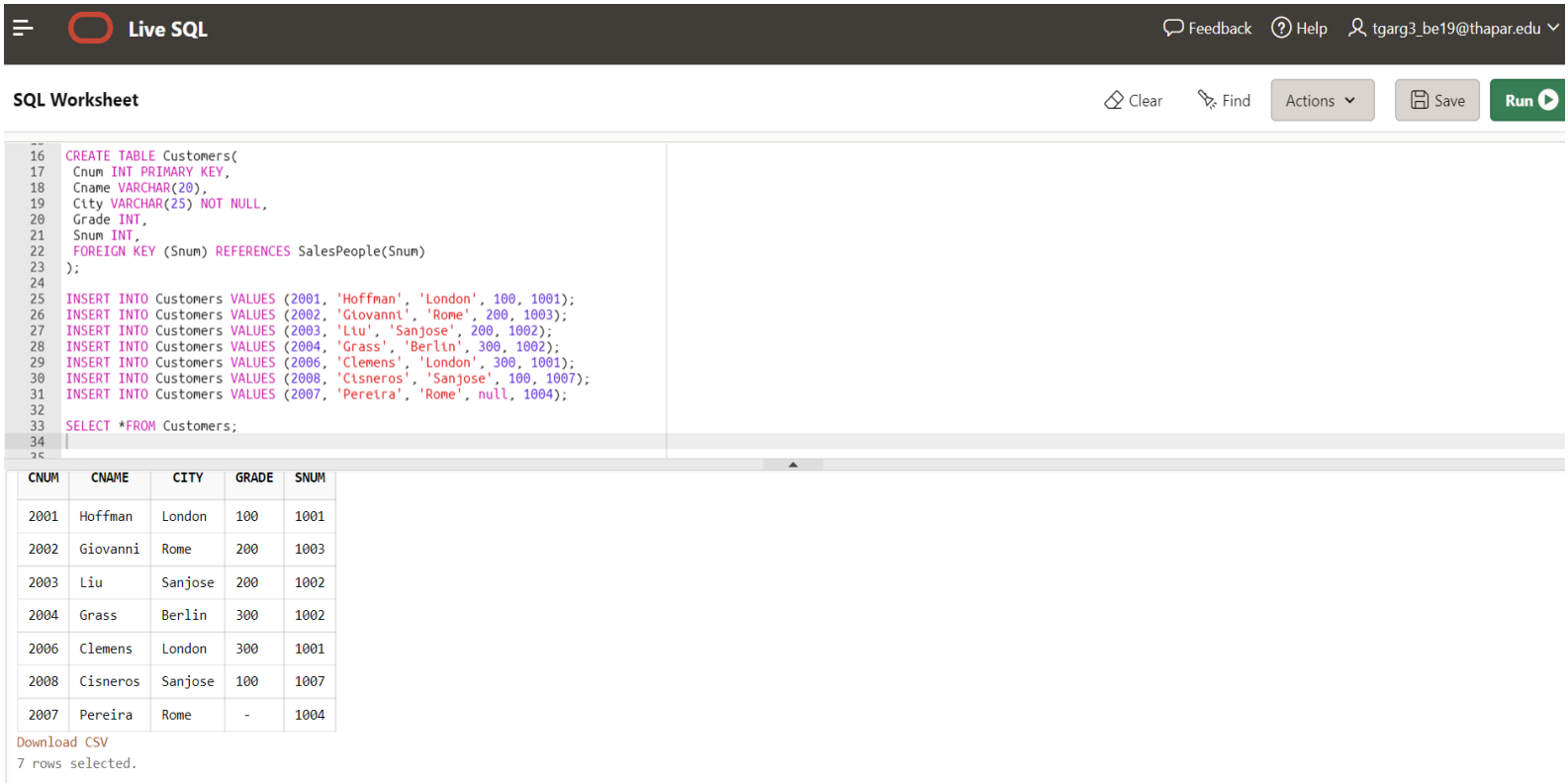
5 rows selected.

Table 2: Customers

Cnum is Primary Key

City has not null constraint.

Snum is foreign key constraint refers Snum column of SalesPeople table.




```
CREATE TABLE Customers(
 Cnum INT PRIMARY KEY,
 Cname VARCHAR(20),
 City VARCHAR(25) NOT NULL,
 Grade INT,
 Snum INT,
 FOREIGN KEY (Snum) REFERENCES SalesPeople(Snum)
);

INSERT INTO Customers VALUES (2001, 'Hoffman', 'London', 100, 1001);
INSERT INTO Customers VALUES (2002, 'Giovanni', 'Rome', 200, 1003);
INSERT INTO Customers VALUES (2003, 'Liu', 'Sanjose', 200, 1002);
INSERT INTO Customers VALUES (2004, 'Grass', 'Berlin', 300, 1002);
INSERT INTO Customers VALUES (2006, 'Clemens', 'London', 300, 1001);
INSERT INTO Customers VALUES (2008, 'Cisneros', 'Sanjose', 100, 1007);
INSERT INTO Customers VALUES (2007, 'Pereira', 'Rome', null, 1004);

SELECT *FROM Customers;
```

CNUM	CNAME	CITY	GRADE	SNUM
2001	Hoffman	London	100	1001
2002	Giovanni	Rome	200	1003
2003	Liu	Sanjose	200	1002
2004	Grass	Berlin	300	1002
2006	Clemens	London	300	1001
2008	Cisneros	Sanjose	100	1007
2007	Pereira	Rome	-	1004

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7 rows selected.

Table 3: Orders

Onum is Primary key

Cnum is foreign key refers to Cnum column of Customers table.

Snum is foreign key refers Snum column of SalesPeople table.


```
CREATE TABLE Orders(
Onum INT PRIMARY KEY,
Amt DEC(6,2),
Odate DATE,
Cnum INT,
Snum INT
);
ALTER TABLE Orders ADD FOREIGN KEY (Cnum) REFERENCES Customers(Cnum);
ALTER TABLE Orders ADD FOREIGN KEY (Snum) REFERENCES SalesPeople(Snum);

INSERT INTO Orders VALUES (3001,18.69,to_date('03-10-1990','DD-MM-YYYY'),2008,1007);
INSERT INTO Orders VALUES (3003,767.19,to_date('03-10-1990','DD-MM-YYYY'),2001,1001);
INSERT INTO Orders VALUES (3002,1900.10,to_date('03-10-1990','DD-MM-YYYY'),2007,1004);
INSERT INTO Orders VALUES (3005,5160.45,to_date('03-10-1990','DD-MM-YYYY'),2003,1002);
INSERT INTO Orders VALUES (3006,1098.16,to_date('03-10-1990','DD-MM-YYYY'),2008,1007);
INSERT INTO Orders VALUES (3009,1713.23,to_date('04-10-1990','DD-MM-YYYY'),2002,1003);
INSERT INTO Orders VALUES (3007,75.75,to_date('04-10-1990','DD-MM-YYYY'), 2004,1002);
INSERT INTO Orders VALUES (3008,4273.00,to_date('05-10-1990','DD-MM-YYYY'),2006,1001);
INSERT INTO Orders VALUES (3010,1309.95,to_date('06-10-1990','DD-MM-YYYY'),2004,1002);
INSERT INTO Orders VALUES (3011,9891.88,to_date('06-10-1990','DD-MM-YYYY'),2006,1001);

SELECT *FROM Orders;
```

ONUM	AMT	ODATE	CNUM	SNUM
3001	18.69	03-OCT-90	2008	1007
3003	767.19	03-OCT-90	2001	1001
3002	1900.1	03-OCT-90	2007	1004
3005	5160.45	03-OCT-90	2003	1002
3006	1098.16	03-OCT-90	2008	1007
3009	1713.23	04-OCT-90	2002	1003
3007	75.75	04-OCT-90	2004	1002
3008	4273	05-OCT-90	2006	1001
3010	1309.95	06-OCT-90	2004	1002
3011	9891.88	06-OCT-90	2006	1001

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1) Count the number of Salesperson whose name begin with **'a'/'A'**.

```
58  SELECT COUNT(Sname) FROM SalesPeople WHERE Sname LIKE 'a%' OR Sname LIKE 'A%';
59
60
61
```

COUNT(SNAME)
1

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2) Count the number of Salesperson belonging to **Newyork**.

```
59
60  SELECT COUNT(Snum) FROM SalesPeople WHERE City = 'Newyork';
61
62
```

COUNT(SNUM)
1

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3) Count the number of Salespeople belonging to **Landon** andbelonging to **Paris**.

```
62  SELECT COUNT(Snum) FROM SalesPeople WHERE City = 'Landon' OR City='Paris';
63
```

COUNT(SNUM)
1

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4) Counts the number of Salespeople registeringorders each day.

```
64  SELECT COUNT(Odate),Odate FROM Orders GROUP BY Odate;
65
```

COUNT(ODATE)	ODATE
2	04-OCT-90
1	05-OCT-90
2	06-OCT-90
5	03-OCT-90

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4 rows selected.

5) Count the number of unique salespeople and return number of salespeople

```
66  SELECT DISTINCT Sname FROM SalesPeople;
67  SELECT DISTINCT COUNT(Sname) FROM SalesPeople;
```

SNAME
Peel
Motika
Serres
Axelrod
Rifkin

Download CSV

5 rows selected.

COUNT(SNAME)
5

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6) Display all the Salesperson whose all orders worth is more than Rs.2000.

```
69  SELECT SUM(Amt),Snum FROM Orders WHERE Amt>2000 GROUP BY Snum;
70
71
72
```

SUM(AMT)	SNUM
5160.45	1002
14164.88	1001

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2 rows selected.

7) Display the number of orders taken by each Salesperson and theirdate of orders.

```
72  SELECT * FROM (
73   (SELECT Snum, Odate FROM Orders) NATURAL JOIN (SELECT Snum, COUNT (*) FROM Orders GROUP BY Snum)
74  ) ORDER BY Snum;
75
76
```

SNUM	ODATE	COUNT(*)
1001	03-OCT-90	3
1001	05-OCT-90	3
1001	06-OCT-90	3
1002	03-OCT-90	3
1002	04-OCT-90	3
1002	06-OCT-90	3
1003	04-OCT-90	1
1004	03-OCT-90	1
1007	03-OCT-90	2
1007	03-OCT-90	2

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8) Write a query that selects the first customer in alphabetical order,whose name begins with **'G'**.

```
SELECT MIN(Cname) FROM Customers WHERE Cname LIKE 'G%';
```

MIN(CNAME)
Giovanni

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9) Find out the largest orders for Snum 1002 & 1007.

```
SELECT MAX(Amt),Snum FROM Orders WHERE Snum=1002 OR Snum=1007 GROUP BY Snum;
```

MAX(AMT)	SNUM
1098.16	1007
5160.45	1002

Download CSV

2 rows selected.

10) Find out the maximum single order amount of a Salesperson over Rs 3000 in a day.

```
SELECT MAX(Amt),Odate FROM Orders WHERE Amt>3000 GROUP BY Odate ORDER BY Odate ASC;
```

MAX(AMT)	ODATE
5160.45	03-OCT-90
4273	05-OCT-90
9891.88	06-OCT-90

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3 rows selected.

11) Find out the no. of Salesperson who belongs to same city and have same commission percentage.

```
SELECT COUNT(Snum),City,Comm FROM SalesPeople GROUP BY City,Comm;
```

COUNT(SNUM)	CITY	COMM
1	London	.12
1	Newyork	.1
1	Barcelona	.15
1	Landon	.11
1	Sanjose	.13

Download CSV

5 rows selected.

12) Calculate total purchase amount of all orders and return total purchase amount.

```
84  SELECT SUM(Amt) FROM Orders;
85
86
```

SUM(AMT)
26208.4

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13) Calculate average purchase amount of all orders and return average purchase amount

```
86  SELECT AVG(Amt) FROM Orders;
87
```

AVG(AMT)
2620.84

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14) Find the number of customers who got at least a gradation for his/her activity

```
88  SELECT COUNT(Grade) FROM Customers;
89
```

COUNT(GRADE)
6

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15) Find the highest grade of the customers for each of the city and return city, maximum grade

```
90  SELECT MAX(Grade),City FROM Customers GROUP BY City;
91
92
93
```

MAX(GRADE)	CITY
200	Rome
300	London
200	Sanjose
300	Berlin

Download CSV

4 rows selected.

16) Find the highest purchase amount ordered by each customer. Return customer ID, maximum purchase amount

```
92  SELECT MAX(Amt),Cnum FROM Orders GROUP BY Cnum ORDER BY Cnum ASC;
93
94
95
```

MAX(AMT)	CNUM
767.19	2001
1713.23	2002
5160.45	2003
1309.95	2004
9891.88	2006
1900.1	2007
1098.16	2008

Download CSV
7 rows selected.

17) Find the highest purchase amount ordered by each customer on a particular date. Return, order date and highest purchase amount

```
94  SELECT MAX(Amt),Odate FROM Orders GROUP BY Odate ORDER BY Odate ASC;
95
96
```

MAX(AMT)	ODATE
5160.45	03-OCT-90
1713.23	04-OCT-90
4273	05-OCT-90
9891.88	06-OCT-90

Download CSV
4 rows selected.

18) Find the highest purchase amount on 4-10-1990 by each salesperson. Return salesperson ID, purchase amount.

```
95
96  SELECT MAX(Amt),Snum FROM Orders WHERE Odate=to_date('04-10-1990','DD-MM_YYYY') GROUP BY Snum ORDER BY Odate ASC;
97
```

MAX(AMT)	SNUM
75.75	1002
1713.23	1003

Download CSV
2 rows selected.