

Assignment-2

Thota GuruTheja Reddy

19BCD7034

I. General Hardware Database:

Sales Person(SalesPersonNumber, SalesPersonName, CommPercentage, YearHire, OfficeNumber)

Customer (CustomerNumber, CustomerName, SalesPersonNumber, HeadQuarterCity)

Customer Employee (CustomerNumber, EmployeeNumber, EmployeeName, Title)

Product (ProductNumber, ProductName, UnitPrice)

Sales (SalesPersonNumber, ProductNumber, Quantity)

Office (OfficeNumber, Telephone, Size)

```
Command Prompt - sqlplus
Enter user-name: system
Enter password:

Connected to:
Oracle Database 11g Express Edition Release 11.2.0.2.0 - 64bit Production

SQL> create table sales_person(salesperson_number number(10),salesperson_name varchar(20),comm_percentage number(2),year_hire number(4),office_number number(10));
Table created.

SQL> create table customer_employee(customer_number number(10),employee_number number(10),employee_name varchar(20),title varchar(20));
Table created.

SQL> create table customer(customer_number number(10),customer_name varchar(20),salesperson_number number(10),headquarter_city varchar(20));
Table created.

SQL> create table product(product_number number(10),product_name varchar(20),unit_price varchar(20));
Table created.

SQL> create table sales(salesperson_number number(10),product_number number(10),quantity number(10));
Table created.

SQL> create table office(office_number number(10),telephone number(10),dimension number(10));
Table created.
```

Inserting sales person details

```
SQL> insert into sales_person values(186,'gurutheja',10,2016,42);
1 row created.

SQL> insert into sales_person values(25,'bhuvanesh',10,2017,45);
1 row created.

SQL> insert into sales_person values(23,'ujwal',4,2016,42);
1 row created.
```

1. Find the commission percentage and year of hire of salesperson number 186.

```
SQL> select comm_percentage, year_hire from sales_person where salesperson_number=186;
```

COMM_PERCENTAGE	YEAR_HIRE
10	2016

2. List the salesperson numbers and salesperson names of those salespersons who have a commission percentage of 10.

```
SQL> select salesperson_number, salesperson_name from sales_person where comm_percentage=10;
```

SALESPERSON_NUMBER	SALESPERSON_NAME
186	gurutheja
25	bhuvanesh

3. List the salesperson number and salesperson name of all of the salespersons.

```
SQL> select salesperson_number, salesperson_name from sales_person where comm_percentage=10;
```

SALESPERSON_NUMBER	SALESPERSON_NAME
186	gurutheja
25	bhuvanesh

4. List the salesperson numbers, salesperson names, and commission percentages of the salespersons whose commission percentage is less than 12.

```
SQL> select salesperson_number, salesperson_name, comm_percentage from sales_person where comm_percentage<12;
```

SALESPERSON_NUMBER	SALESPERSON_NAME	COMM_PERCENTAGE
186	gurutheja	10
25	bhuvanesh	10
23	ujwal	4

Inserting customer details

```
SQL> insert into customer values(1782, 'srinivas', 186, 'newyork');
1 row created.

SQL> insert into customer values(1700, 'charan', 25, 'atlanta');
1 row created.

SQL> insert into customer values(1230, 'prabhat', 186, 'newyork');
1 row created.

SQL> insert into customer values(1530, 'abhishek', 23, 'atlanta');
1 row created.
```

5. List the customer numbers and headquarters cities of the customers that have a customer number of at least 1700.

```
SQL> select customer_number,headquarter_city from customer where customer_number>=1700;
```

CUSTOMER_NUMBER	HEADQUARTER_CITY
1782	newyork
1700	atlanta

6. List the customer numbers, customer names, and headquarters cities of the customers that are headquartered in New York and that have a customer number higher than 1500.

```
SQL> select customer_number,customer_name,headquarter_city from customer where headquarter_city='newyork' and customer_number>1500;
```

CUSTOMER_NUMBER	CUSTOMER_NAME	HEADQUARTER_CITY
1782	srinivas	newyork

7. List the customer numbers, customer names, and headquarters cities of the customers that are headquartered in New York or that have a customer number higher than 1500.

```
SQL> select customer_number,customer_name,headquarter_city from customer where headquarter_city='newyork' or customer_number>1500;
```

CUSTOMER_NUMBER	CUSTOMER_NAME	HEADQUARTER_CITY
1782	srinivas	newyork
1700	charan	atlanta
1230	prabhat	newyork
1530	abhishek	atlanta

8. List the customer numbers, customer names, and headquarters cities of the customers that are headquartered in New York or that satisfy the two conditions of having a customer number higher than 1500 and being headquartered in Atlanta.

```
SQL> select customer_number,customer_name,headquarter_city from customer where headquarter_city='newyork' or customer_number>1500 and headquarter_city='atlanta';
```

CUSTOMER_NUMBER	CUSTOMER_NAME	HEADQUARTER_CITY
1782	srinivas	newyork
1700	charan	atlanta
1230	prabhat	newyork
1530	abhishek	atlanta

9. Which cities serve as headquarters cities for General Hardware customers?

```
SQL> select headquarter_city from customer;
```

HEADQUARTER_CITY
newyork
atlanta
newyork
atlanta

10. Find the customer numbers, customer names, and headquarters cities of those customers with customer numbers greater than 1000. List the results in alphabetic order by headquarters cities.

```
SQL> select customer_number,customer_name,headquarter_city from customer where customer_number>1000 order by headquarter_city asc;
```

CUSTOMER_NUMBER	CUSTOMER_NAME	HEADQUARTER_CITY
1700	charan	atlanta
1530	abhishek	atlanta
1230	prabhat	newyork
1782	srinivas	newyork

11. Find the average number of units of the different products that Salesperson 137 sold (i.e., the average of the quantity values in the first three records of the SALES table).

```
SQL> SELECT AVG(quantity) FROM sales Where salesperson_number=137 ;

AVG(QUANTITY)
-----
              5
```

12. What is the largest number of units of Product Number 21765 that any individual salesperson has sold?

```
SQL> SELECT Max(quantity) FROM sales where product_number=21765;

MAX(QUANTITY)
-----
              5
```

13. How many salespersons have sold Product Number 21765?

```
SQL> SELECT count(salesperson_number) FROM sales where product_number=21765;

COUNT(SALESPERSON_NUMBER)
-----
                           1
```

14. Find the total number of units of all products sold by each salesperson.

```
SQL> select salesperson_number,sum(quantity)
  2  from sales
  3  group by salesperson_number;

SALESPERSON_NUMBER SUM(QUANTITY)
-----
                25         70
                137         15
                23         50
                186         68

SQL>
```

15. Find the total number of units of all products sold by each salesperson whose salesperson number is at least 150.

```
SQL> select salesperson_number,sum(quantity) from sales where salesperson_number>=150
  2  group by salesperson_number;

SALESPERSON_NUMBER SUM(QUANTITY)
-----
                186         68
```

16.

Find the total number of units of all products sold by each salesperson whose salesperson number is at least 150.

```
SQL> select salesperson_number,sum(quantity) from sales where salesperson_number>=150
2 group by salesperson_number;
```

```
SALESPERSON_NUMBER SUM(QUANTITY)
-----
186 68
```

17.

Find the total number of units of all products sold by each salesperson whose salesperson number is at least 150. Include only salespersons whose total number of units sold is at least 5000.

```
SQL> select salesperson_number,sum(quantity) from sales where salesperson_number>=150
2 group by salesperson_number
3 having sum(quantity)>=5000;
```

```
no rows selected
```

18. Find the name of the salesperson responsible for Customer Number 1525.

```
SQL> select salesperson_name from sales_person, customer
2 where sales_person.salesperson_number=customer.salesperson_number
3 and customer_number=1525;
```

```
SALESPERSON_NAME
-----
bhuvanesh
```

19. List the *names* of the products of which salesperson Adams has sold more than 2000 units.

```
SQL> select product_name from sales_person,product,sales
2 where sales_person.salesperson_number=sales.salesperson_number
3 and sales.product_number=product.product_number
4 and salesperson_name='adams'
5 and quantity>2000;
```

```
PRODUCT_NAME
-----
ironman
```

20. Which salespersons with salesperson numbers greater than 200 have the lowest commission percentage?

```
SQL> select salesperson_number from sales_person where salesperson_number>200
2 and comm_percentage=(select min(comm_percentage) from sales_person where salesperson_number>200);
```

```
SALESPERSON_NUMBER
-----
215
```