Lab-7

1. Find a given number is prime or not prime.

```
declare
n number;
i number;
temp number;
begin
n := 13;
i := 2;
temp := 1;
for i in 2..n/2
        loop
                if mod(n, i) = 0
                then
                        temp := 0;
                        exit;
                end if;
        end loop;

        if temp = 1
        then
                dbms_output.put_line('Prime');
        else
                dbms_output.put_line('Not Prime');
        end if;
end;
```

Output:

```
Statement processed.
Prime
```

2. A student wrote 6 exam in this semester and got marks also. Write a program to get all the marks and fins the average mark for the student. (you can use maximum 2 variable)

```
DECLARE
  type grades IS VARRAY(6) OF INTEGER;
  marks grades;
  total integer;
  avgs integer;
  ni integer;
BEGIN
  marks:= grades(98, 97, 78, 87, 92, 83);
  total := marks(1)+marks(2)+marks(3)+marks(4)+marks(5)+marks(6);
  avgs := total/marks.count;
  ni := marks.count;
  FOR i in 1 .. ni LOOP
    dbms_output.put_line('Marks: ' || marks(i));
  END LOOP;
   dbms_output.put_line('Average Marks: '|| avgs );
END;
```

Output:

```
Statement processed.
Marks: 98
Marks: 97
Marks: 78
Marks: 87
Marks: 92
Marks: 83
Average Marks: 89
```

3. A human will be called child (age<10), youth (age is between 11 to 20), young (age is between 21 to 30), middle aged (age is between 31 to 45), old (age is more than 46), ask a person about his/her age and categorize them.

```
DECLARE
  age integer;
BEGIN
  age := 30;
  CASE
  WHEN age <= 10 THEN
    dbms_output.put_line('The Human is Child');
  WHEN age >= 11 AND age <= 20 THEN
    dbms_output.put_line('The Human is Youth');
  WHEN age >= 21 AND age <= 30 THEN
    dbms_output.put_line('The Human is Young');
  WHEN age >= 31 AND age <= 45 THEN
    dbms_output.put_line('The Human is Middle-Aged');
  WHEN age >=46 THEN
    dbms_output.put_line('The Human is Old');
  END CASE;
```

END;

Output:

```
Statement processed.
The Human is Young
```

Database schema

create table sales_person(salespersonNumber int, salespersonName varchar(256),commpercentage int,yearhire int,officenumber int);

insert into sales_person values(123,'Dutch',17,2002,76567);

insert into sales_person values(124,'Hosea',18,2006,88890);

insert into sales_person values(125,'Arthur',19,2020,99099);

select * from sales_person;

create table customer(customerNumber int,customerName varchar(256),salespersonNumber int,headQuarterCity varchar(256));

insert into customer values(141,'Raja',123,'Hyderabad');

insert into customer values(142,'Veera',124,'Hyderabad');

select * from customer;

create table customer_employee(customerNumber int,employeeNumber int,employeeName varchar(256),tittle varchar(256));

insert into customer_employee values(141,111,'Manoj','Developer');

select * from customer_employee;

create table product (ProductNumber int , ProductName varchar(256), UnitPrice int, Status varchar(256));

insert into product values(111,'Waterbottle',40,'Available');

insert into product values(112,'Heater',41,'Available');

select * from product;

create table sales (SIDs int , SalesPersonNumber int, ProductNumber int, Quantity int, Dates int);

insert into sales values(12,124,112,10,2019);

insert into sales values(11,123,111,5,2002);

insert into sales values(13,125,113,90,2020-1-8);

select * from sales;

create table office (OfficeNumber int , OfficeAddress varchar(256), Telephone int , Siz int);

insert into office values(101,'Hydernagar',123432,12);

select * from office;

Output:

Table created.

1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.

SALESPERSONNUMBER	SALESPERSONNAME	COMMPERCENTAGE	YEARHIRE	OFFICENUMBER
123	Dutch	17	2002	76567
124	Hosea	18	2006	88890
125	Arthur	19	2020	99099

Download CSV
3 rows selected.

Table created.

1 row(s) inserted.

1 row(s) inserted.

CUSTOMERNUMBER	CUSTOMERNAME	SALESPERSONNUMBER	HEADQUARTERCITY
141	Raja	123	Hyderabad
142	Veera	124	Hyderabad

Download CSV

2 rows selected.

Table created.

1 row(s) inserted.

CUSTOMERNUMBER	EMPLOYEENUMBER	EMPLOYEENAME	TITTLE
141	111	Manoj	Developer

Download CSV

Table created.

1 row(s) inserted.

1 row(s) inserted.

PRODUCTNUMBER	PRODUCTNAME	UNITPRICE	STATUS
111	Waterbottle	40	Available
112	Heater	41	Available

Download CSV
2 rows selected.

Table created.

1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.

SIDS	SALESPERSONNUMBER	PRODUCTNUMBER	QUANTITY	DATES
12	124	112	10	2019
11	123	111	5	2002
13	125	113	90	2011

Download CSV
3 rows selected.

Table created.

1 row(s) inserted.

OFFICENUMBER	OFFICEADDRESS	TELEPHONE	SIZ
101	Hydernagar	123432	12

Download CSV

1. Find the details of the salesperson for a given Salesperson Number

select * from sales_person

where salespersonNumber=123;

Output:

SALESPERSONNUMBER	SALESPERSONNAME	COMMPERCENTAGE	YEARHIRE	OFFICENUMBER
123	Dutch	17	2002	76567

Download CSV

2. Find the product got maximum sale in terms of price

select productName

from sales s,product p

where p.productNumber=s.productNumber and unitprice=(select max(unitprice) from sales where Dates=2019);

Output:

PRODUCTNAME
Heater

3. Insert the details of a newly joined salesperson.

insert into sales_person values(125,'ashish',12,2019,12331);

select * from sales_person;

Output:

SALESPERSONNUMBER	SALESPERSONNAME	COMMPERCENTAGE	YEARHIRE	OFFICENUMBER
123	Dutch	17	2002	76567
124	Hosea	18	2006	88890
125	Arthur	19	2020	99099
125	ashish	12	2019	12331

Download CSV

4 rows selected.

4. Update the price of a particular product.

update product set unitprice=190

where productNumber=111;

select * from product;

Output:

PRODUCTNUMBER	PRODUCTNAME	UNITPRICE	STATUS
111	Waterbottle	190	Available
112	Heater	41	Available

Download CSV

2 rows selected.

5. Find the salesperson, who sold maximum quantity in January 2020

select salespersonName

from sales_person w,sales s

where s.salespersonNumber=w.salespersonNumber and quantity=(select max(quantity) from sales where dates=2020);

Output:

```
no data found
```

6. Update the details of office as it got a new location.

update office set officeaddress='kukatpally'

where officeNumber=101;

select * from office;

Output:

```
1 row(s) updated.
```

OFFICENUMBER	OFFICEADDRESS	TELEPHONE	SIZ
101	kukatpally	123432	12

Download CSV

7. Change the status of a product to unavailable.

update product set status='unavailable' where

productNumber=111;

select * from product;

Output:

```
1 row(s) updated.
```

PRODUCTNUMBER	PRODUCTNAME	UNITPRICE	STATUS
111	Waterbottle	190	unavailable
112	Heater	41	Available

Download CSV

2 rows selected.

8. Delete a salesperson from the database, as he left the job.

delete from sales_person

where salespersonNumber=125;

select * from sales_person;

Output:

```
2 row(s) deleted.
```

SALESPERSONNUMBER	SALESPERSONNAME	COMMPERCENTAGE	YEARHIRE	OFFICENUMBER
123	Dutch	17	2002	76567
124	Hosea	18	2006	88890

Download CSV

2 rows selected.

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