190031187 **NERELLA VENKATA RADHAKRISHNA**

DBMS SKILL 10

PRE-LAB

1. **Analyze the code and tell your observation?**

```
DECLARE
a number(3) := 100;
BEGIN
IF (a = 50 ) THEN
dbms_output.put_line('Value of a is 10' );
ELSEIF ( a = 75 ) THEN
dbms_output.put_line('Value of a is 20' );
ELSE
dbms_output.put_line('None of the values is matching');
END IF;
dbms_output.put_line('Exact value of a is: '|| a );
END;
```

Ans) The Output is
None of the values is matching
Exact value of a is 100

2. What will be the output of the following code?

```
DECLARE
 lines dbms_output.chararr;
  num_lines number;
BEGIN
   Dbms_output.enable;
  dbms_output.put_line('Hello!');
  dbms_output.put_line('Hope you are doing well!');
  num_lines := 2;
  dbms_output.get_lines(lines, num_lines);
  FOR i IN 1..num_lines LOOP
    dbms_output.put_line(lines(i));
  END LOOP;
END;
```

Ans) Hello Reader
Hope you have enjoyed doing well
2

3. Consider the following code :–

```
DECLARE
  -- Global variables
 num number := 95;
```

```
BEGIN
  dbms_output.put_line('num: ' || num1);
  DECLARE
    -- Local variables
    num number := 195;
   BEGIN
    dbms_output.put_line('num: ' || num1);
   END;
END;
```

What will happen when the code is executed?

Ans) Not executed , because syntax error.

4. What would be printed when the following code is executed?

```
DECLARE
    x   NUMBER;
   BEGIN
     x := 5;
     x := 10;
     dbms_output.put_line(-x);
     dbms_output.put_line(+x);
     x := -10;
     dbms_output.put_line(-x);
     dbms_output.put_line(+x);
  END;
```

Ans) -10
10
10
-10

5. What will be printed by the following PL/SQL block?

```
DECLARE
  a number;
  b number;
  c number;
PROCEDURE findMin(x IN number, y IN number, z OUT number) IS
BEGIN
IF x < y THEN
    z:= x;
  ELSE
    z:= y;
END IF;
END;
BEGIN
  a:= 2;
  b:= 5;
  findMin(a, b, c);
  dbms_output.put_line(c);
END;
```

Ans) -5
-10
-25

6. What will be printed by the following PL/SQL block?

```
DECLARE
 a number;
PROCEDURE squareNum(x IN OUT number) IS
BEGIN
  x := x * x;
END;
BEGIN
   a:= 5;
   squareNum(a);
   dbms_output.put_line(a);
END;
```

Ans) **-5**
-10
-25

7. When is the pre-defined exception "CASE_NOT_FOUND" raised?

None of the choices in the when clauses of a case statement is selected , and there is no ELSE clause.

INLAB

Implement PL/SQL Queries on Case Study 9 (MILITARY DATABASE)

1) Create a function that takes solider ID FROM NAVY and return the number of mission done by the soldier in the past.

```
delimiter @
create function military.hello3(n_id int)
returns integer
deterministic
begin
    declare m integer;

    if n_id = 100 then
        set m = 2;
    else if n_id = 102 then
        set m = 1;
    else if n_id = 103 then
        set m = 3;
    else if n_id = 104 then
        set m = 2;
    else if n_id = 105 then
        set m= 4;
    end if;
    return (m);
end$$
delimiter ;
```

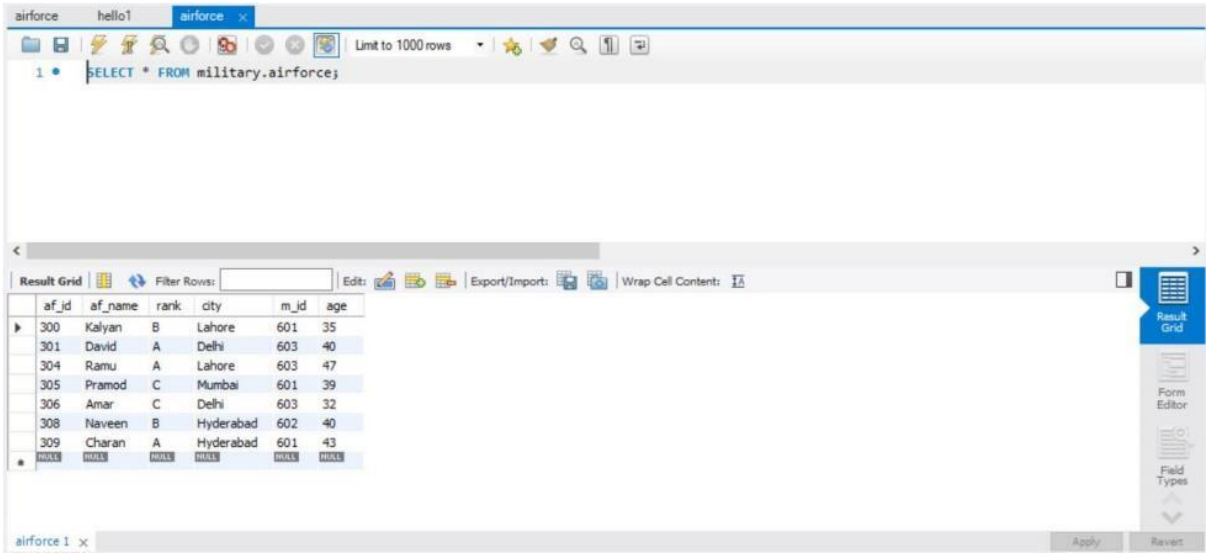
2) Create a procedure to insert record into army table

```
drop procedure if exists military.hello;
delimiter @
create procedure military.hello()
begin
    insert into military.army values(210,'Chaitanya','A','Guntur',600);
end;
call military.hello();
SELECT * FROM military.army;
```

a_id	a_name	rank	city	m_id
207	Kamal	B	Hyderabad	605
208	Gopal	A	Delhi	602
209	Raju	C	Delhi	601
210	Chaitanya	A	Guntur	600

3) Create a procedure to delete airforce soldier of age above 50

```
drop procedure if exists military.hello1;
delimiter @
create procedure military.hello1()
begin
    delete from military.airforce where age>=50;
end;
delimiter;
```



af_id	af_name	rank	city	m_id	age
300	Kalyan	B	Lahore	601	35
301	David	A	Delhi	603	40
304	Ramu	A	Lahore	603	47
305	Pramod	C	Mumbai	601	39
306	Amar	C	Delhi	603	32
308	Naveen	B	Hyderabad	602	40
309	Charan	A	Hyderabad	601	43
NULL	NULL	NULL	NULL	NULL	NULL

190031187 **NERELLA VENKATA RADHAKRISHNA**

POSTLAB

1) Create a user-defined exception by the name of exp_check. Select the ename and hiredate of all employees into a cursor. Your program should calculate the experience of all the employees in years, and insert the ename and experience of each employee into temp table. If any employee has experience less than 2 years, the program should be aborted with a suitable message. Raise the user-defined exception exp_check to achieve this. Display the results on the screen using dbms_output.put_line.

Ans)

```
Declare exp_check exception;
    Cursor c1 IS
     Select empname;
            Joined
     From emp;
Begin
  For I in c1 loop
if (trunc(months_between(sysdate, in joined)/12)<2) then raise exp_check;
Else
Insert into temp2 Values ( I empname , trunc( months_between(sysdate, I joined)/12));
End if;
        End loop;
Excpetion
when exp_check then
        dbms_output.put_line('experience is less than 2 years not allowed');
When others then
dbms_output.put_line('Unidentified error occurred');
End;
```

Output: experience is less than 2 years is not allowed

2) Create a table EMPLOYEE with the following columns:-

Employee No. Varchar24

Employee Name Varchar30

Designation Varchar10

Category Character 1

Basic Salary Number 4

Category may be ?J?, ?S?, or ?W? for Jr. officers, Sr. officers or Worker category.

Formulae:-

DA = 35% of Basic Salary correct up to paise.
HRA = 15% of Basic Salary subject to a maximum of Rs.
250/1000/30000 for categories W/J/S
respectively.
Gross = Basic Salary +DA +HRA

Output the Employee Number and the Gross for each employee in a separate table.

CREATE TABLE EMPLOYEE ("Employee No " Varchar2 (4), "Employee Name" Varchar2 (30), Designation Varchar2 (10), Category Character (1), "Basic Salary " Number (4))
--Insert dummy data:-

--Empl	EmployeeName	DESIGNATION	C	Basic Salary
--1000	rakesh	Sr.off	s	3000
--1001	peeyoosh	Sr.off	s	4000
--1002	malik	Jr.off	s	5000

CREATE TABLE employee_gross
CREATE TABLE gross ("Employee No " Varchar2 (4), "Gross Salary " Number (4))

Ans)

```
create or replace procedure gross as
cursor c1 is select * from employee;
emp_record employee%rowtype;
da number(20,2);
hra number(20,2);
gross number(20,2);
begin
        delete from employee_gross;
        for emp_record in c1
        loop
          da:=emp_record."Basic Salary "*35/100;
          hra:=emp_record."Basic Salary "*15/100;
          if emp_record.Category='j' and hra>250 then
                hra:=250;
          elsif emp_record.Category='s' and hra>1000 then
                hra:=1000;
          elsif emp_record.Category='w' and hra>30000 then
                hra:=30000;
          else
                hra:=0;
          end if;
          gross:=emp_record."Basic Salary "+da+hra;
          insert into employee_gross values(emp_record."Employee No ",gross);
        end loop;
end;
```

3) Write a program to read in a number and print it out digit by digit, as a series of words. For example, the number 523 would be printed as "five two three". Use decode function within a for loop. Display the results on the screen using dbms_output.put_line.

Ans)

```
Declare
Num varchar(10):='&number';
I varchar(1);
```

```
C int := length(num);
Result varchar(10);

Begin
dbms_output.put_line('Entered no.Is');
Loop i:=substr(num,I,1);
Num := substr(num,2);
Select
decode(i,1,'one',2,'two',3,'three',4,'four',5,'five',6,'six',7,'seven',8,'eight',9,'nine',0
,'zero') into result 0 from dual;
dbms_output.put_line(Result);
Exit when c=1;
c:=c-1;
end loop;
end;
```