

PROGRAM 1

Write a PL/SQL block to calculate the incentive of an employee whose ID is 110.

DECLARE

```
pl-emp-id employee-id % TYPE = 110;  
pl-salary employees.salary % TYPE;  
pl-incentive NUMBER;  
BEGIN  
  select salary INTO pl-salary  
  FROM employees  
  where employee-id = pl-emp-id;  
  pl-incentive := pl-salary * 0.10  
  UPDATE employees  
  SET incentive = pl-incentive  
  WHERE employee-id = pl-emp-id;  
  DBMS_OUTPUT.PUT_LINE ('Incentive for employee ID' || pl-emp-id ||  
    ' is ' || pl-incentive);  
COMMIT;  
END;
```

PROGRAM 2

Write a PL/SQL block to show an invalid case-insensitive reference to a quoted and without quoted user-defined identifier.

```
DECLARE  
  employee_name VARCHAR2(100);  
  "EmployeeID" NUMBER;  
BEGIN  
  employee_name := 'John Doe';  
  "EmployeeID" := 40;  
  DBMS_OUTPUT.PUT_LINE ('Employee Name : ' || employee_name);  
  DBMS_OUTPUT.PUT_LINE ('Employee ID : ' || EmployeeID);  
END;
```

PROGRAM 3

Write a PL/SQL block to adjust the salary of the employee whose ID 122.

Sample table: employees

```
v_employee_id NUMBER := 122;  
v_salary NUMBER  
v_new_salary NUMBER;  
v_increase_percentage NUMBER := 0.40;  
  
SELECT salary INTO v_salary  
FROM employees  
WHERE employee_id = v_employee_id;  
v_new_salary := v_salary + (v_salary * v_increase_percentage / 100);  
  
UPDATE employees  
SET salary = v_new_salary  
WHERE employee_id = v_employee_id;  
DBMS_OUTPUT.PUT_LINE ('Employee ID' || v_employee_id || 'new salary: ' || v_new_salary);  
END;
```

PROGRAM 4

Write a PL/SQL block to create a procedure using the "IS [NOT] NULL Operator" and show AND operator returns TRUE if and only if both operands are TRUE.

```
create or replace procedure check-null  
is  
value1 number := 10;  
value2 number := null;  
begin  
if value1 is not null and value2 is null then  
dbms_output.put_line ("Both value are not NULL");  
else  
dbms_output.put_line ("Null value found");  
end if;  
end;  
BEGIN  
check-null;  
END;
```


PROGRAM 5

Write a PL/SQL block to describe the usage of LIKE operator including wildcard characters and escape character.

```
declare
v-employeename employees.first_name% type;
v-employeeid NUMBER := 122;
begin
Select first_name into v-employeename
from employees
where first_name like '%e%' and employee-id = v-employeeid;
DBMS_OUTPUT.PUT_LINE (v-employeename);
END;
```

PROGRAM 6

Write a PL/SQL program to arrange the number of two variable in such a way that the small number will store in num_small variable and large number will store in num_large variable.

```
declare
ab number := 10;
cd number := 20;
num_small number;
num_large number;
begin
if ab < cd then
    num_small := cd;
    num_large := ab;
else
    num_small := ab;
    num_large := cd;
end if
dbms_output.put_line ('small number = ' || num_small);
dbms_output.put_line ('large number = ' || num_large);
end;
```

PROGRAM 7

Write a PL/SQL procedure to calculate the incentive on a target achieved and display the message either the record updated or not.

```

create or replace procedure calculate_incentive(p-emp-id)
employees.employee-id % type, p-target number)
is
v-incentive number(7,2);
v-salary employees.salary % type;
begin
select salary into v-salary
from employees
where employee-id = p-emp-id;
if p-target >= 100000 then
v-incentive := v-salary * 0.1;
dbms_output.put_line('Incentive of || v-incentive || calculated for employee ID' || p-emp-id);
else
dbms_output.put_line('No incentive for employee ID' || p-emp-id);
end if; end;

```

PROGRAM 8

Write a PL/SQL procedure to calculate incentive achieved according to the specific sale limit.

```

create or replace procedure incentive_sale(p-emp-id employees.employee-id % type, p-sales number)
is
v-incentive number(7,2);
begin
if p-sales > 100000 then
v-incentive := p-sales * 0.1;
update employees
set incentive = p-sales * 0.05;
else
v-incentive = 0;
end if;
dbms_output.put_line('Incentive for employees ID' || p-emp-id || ' is : ' || v-incentive);
end;

begin
incentive_sales(122, 500000);
end;

```


PROGRAM 9

Write a PL/SQL program to count number of employees in department 50 and check whether this department have any vacancies or not. There are 45 vacancies in this department.

```
declare
no-of-emp number;
vacancies number := 45;
begin
select count(*) into no-of-emp from employees where department_id = 50;
if no-of-emp < vacancies then
dbms_output.put_line('vacancies are available');
else
dbms_output.put_line('vacancies are not available');
END;
/
```

PROGRAM 10

Write a PL/SQL program to count number of employees in a specific department and check whether this department have any vacancies or not. If any vacancies, how many vacancies are in that department.

```
SET SERVER output ON;
declare
emp-count number;
vacancies number := 45;
begin
select count(*) into emp-count from employee where
department = 50;
DBMS-output.put_line('employees depord' ||
emp-count || 'vacancies' ||
(vacancies - emp-count));
END;
/
```

PROGRAM 11

Write a PL/SQL program to display the employee IDs, names, job titles, hire dates, and salaries of all employees.

```
Set Server output on;
begin
for rec in (select employee-id, name, Job-title, hire date,
                Salary
FROM DBMS_OUTPUT ('ID: ' || rec.employee-id ||
                  ', Name: ' || rec-name || ', Job title: ' || rec.job-title ||
                  ' Hire Date: ' || rec.hire-date ||
                  ' Salary: ' || rec.salary);
END LOOP;
END;
```

PROGRAM 12

Write a PL/SQL program to display the employee IDs, names, and department names of all employees.

```
SET SERVER OUTPUT ON;
BEGIN
FOR REC IN (select e.employee-id, e.name,
                  d.department-name
FROM employees e
JOIN department d on e.department-id = d.department-id)
DBMS_OUTPUT.PUT_LINE ('ID: ' || rec.employees_id ||
                      ', NAME: ' || rec.name ||
                      ', Department: ' || rec.department-name);
END LOOP;
END;
```


PROGRAM 13
Write a PL/SQL program to display the job IDs, titles, and minimum salaries of all jobs.

```
SET SERVER OUTPUT ON;  
BEGIN  
FOR rec IN (select job_id, job_title, min_salary  
FROM) LOOP  
DBMS_OUTPUT.PUT_LINE ('Job ID: ' || rec.job_id ||  
, title : ' || rec.job_title ||  
, min salary : ' || rec.min_salary);  
  
End loop;  
End;
```

PROGRAM 14
Write a PL/SQL program to display the employee IDs, names, and job history start dates of all employees.

```
Set Serveroutput ON;  
Begin  
For rec (select e.employee_id - j-employ-  
id) id)  
DBMS_OUTPUT.PUT_LINE ('ID: ' || rec.employee  
Name : ' || rec.name ||  
, Job Start Date : || rec.start_date);  
  
END loop;  
END;
```

PROGRAM 15

Write a PL/SQL program to display the employee IDs, names, and job history end dates of all employees.

```
SET SERVER OUTPUT ON ;  
BEGIN  
  FOR REC IN (SELECT e.employee_id, e.name, j.end_date  
    FROM employee e  
    JOIN job_history j ON e.employee_id = j.employee_id)  
  DBMS_OUTPUT.PUT_LINE ('ID' || rec.employee_id ||  
    ', Name : ' || rec.name ||  
    ', Job End date : ' || rec.end_date);  
END LOOP ;  
END
```

Evaluation Procedure	Marks awarded
PL/SQL Procedure(5)	
Program/Execution (5)	
Viva(5)	
Total (15)	
Faculty Signature	