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Class: CE-3AB2

PRACTICAL: 6
PL / SQL PRACTICAL: 1

1.Write a pl/sql code for calculator. Accept two values from user and accept any operator like '+','-','*','/'.

Query: declare
a
number(5); b
number(5);
ans number(5);

begin a:=&a; b:=&b; ans:=a+b;
DBMS_OUTPUT.PUT_LINE('addition='||ans);

ans:=a-b;
DBMS_OUTPUT.PUT_LINE('subtraction='||ans);

ans:=a*b;
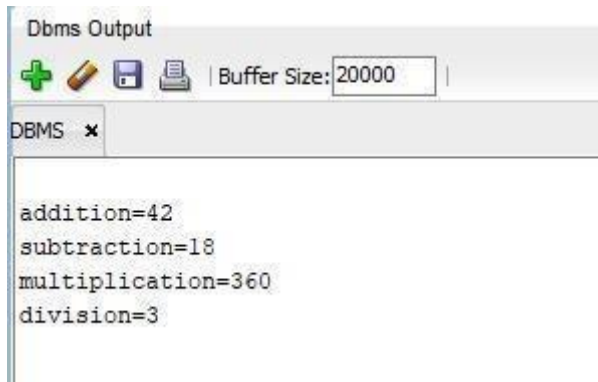DBMS_OUTPUT.PUT_LINE('multiplication='||ans);

ans:=a/b;
DBMS_OUTPUT.PUT_LINE('division='||ans);

end;

Output:
Here, values of a=30 and b=12.

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```
Dbms Output
    ➕  ✏  💾  🖨  | Buffer Size: 20000  |
DBMS  ✕

addition=42
subtraction=18
multiplication=360
division=3
```
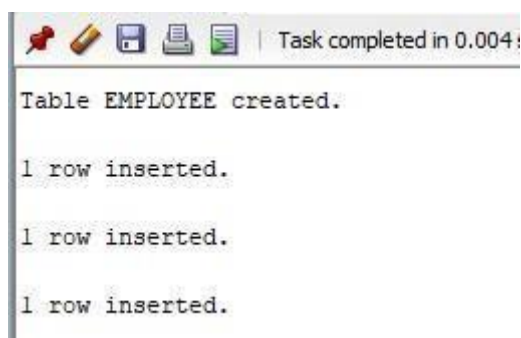
2. Write a pl/sql code for add 50% salary of 'Riya' and 70% salary of 'Rima' to salary of 'Rekha'.

Table: Employee

Name	Salary
Riya	10000
Rima	6000
Rekha	8000

create table employee(name varchar2(20) ,salary
number(10)); insert into employee
values('Riya',10000);   insert into employee
values('Rima',6000); insert into employee
values('Rekha',8000); select
*from employee;

```
📌  ✏  💾  🖨  📋  | Task completed in 0.004

Table EMPLOYEE created.

1 row inserted.

1 row inserted.

1 row inserted.
```

	NAME	SALARY
1	Riya	10000
2	Rima	6000
3	Rekha	8000

Query: declare
R1 number(10);
R2 number(10);
R3 number(10);

begin select salary into R1 from employee where name='Riya'; select salary into R2 from employee where name='Rima';

R1:=((R1*50)/100);
R2:=((R2*70)/100);

select salary into R3 From employee where name='Rekha';

R3:=R3+R1+R2;

update employee set salary=R3 where name='Rekha'; end;

Output:

	NAME	SALARY
1	Riya	10000
2	Rima	6000
3	Rekha	17200

3.   Write a pl/sql code to give maximum salary of Rima or Rekha to Riya. Query: declare
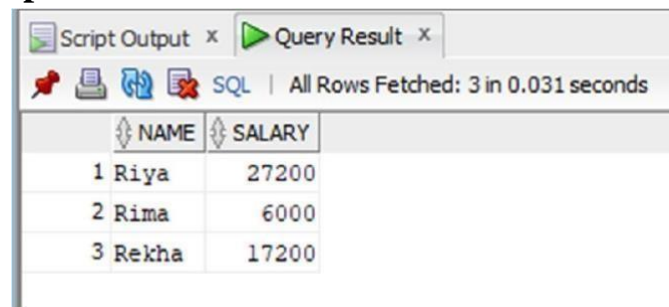R1 number(10);
R2 number(10);

begin select max(salary) into R1 from employee where name='Rima'
or
name='Rekha';   select salary into R2 from employee where
name='Riya';

R2:=R2+R1;

update employee set salary=R2 where name='Riya'; end;

Output:

	NAME	SALARY
1	Riya	27200
2	Rima	6000
3	Rekha	17200

Script Output × Query Result ×

SQL | All Rows Fetched: 3 in 0.031 seconds

4.   **Write a pl/sql code that will accept emp_no and debit amount from user. If Balance is below 500/- whenever you debit the amount then give error message. "Balance below 500/-"otherwise update the table.**

create table salary(emp_no number(10),name varchar2(10),salary number(10)); insert into salary values('1001','Riya',5000);   insert into salary values('1002','Rima',10000); insert into salary values('1003','Rekha',12000); insert into salary values('1004','Dhara',6000); select *from salary;

Table SALARY created.

1 row inserted.

1 row inserted.

1 row inserted.

1 row inserted.

	EMP_NO	NAME	SALARY
1	1001	Riya	5000
2	1002	Rima	10000
3	1003	Rekha	12000
4	1004	Dhara	6000

Query: declare emp number;
amt number; bal number;
new_bal number;

begin
emp:=&emp;
amt:=&amt;

select salary into bal from salary where emp_no = emp;

if amt>bal then
DBMS_OUTPUT.PUT_LINE(' AMOUNT IS MORE THEN BALANCE...');

else   new_bal:=bal-amt;

if(new_bal<500) then
DBMS_OUTPUT.PUT_LINE('Balance below 500/-');

else
update Salary set salary=new_bal where emp_no = emp;
DBMS_OUTPUT.PUT_LINE('Transaction Completed...');
end if;   end if;   end;

Output:

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Here, Enter values for emp=1003 and amt=3000.

	EMP_NO	NAME	SALARY
1	1001	Riya	5000
2	1002	Rima	10000
3	1003	Rekha	6500
4	1004	Dhara	6000

5. Write a pl/sql block for Factorial (use a) If and Goto statement b) for loop).

a)If and goto statement:

```
declare n number;  fact  number:=1;   i
number;

begin  n:=&n;  <<Again>>   if(n>=1)
then fact
:= fact*n;  n:=n-1;   GOTO
Again;    end
if;
DBMS_OUTPUT.PUT_LINE('Factorial is : '|| fact);  end;
```

Output:
Here, input is 4

```
Transaction Completed...

Factorial is : 24
```
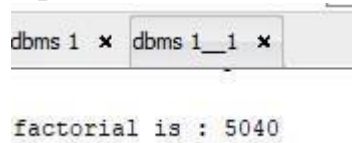
b)for loop:

```
declare n   number; fact
number:=1;
i number;

begin  n:=&n;  for i in
1.. n
LOOP
fact:=fact*i; end LOOP;
```

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DBMS_OUTPUT.PUT_LINE('factorial is : '||fact); end;

Output:
Here, input is 7

dbms 1 ×   dbms 1__1 ×

factorial is : 5040

6. Write pl/sql code for following. If the salary of employee no 1001 is less than 6000 then change the salary to 6000. The salary change is to be recorded in the old_salary table with date on which salary changed.

Table: old_salary(emp_no,old_salary,change_date)
Table: Salary

Emp_no	Name	Salary
1001	Riya	5000
1002	Rima	10000
1003	Rekha	12000
1004	Dhara	6000

create table old_salary(emp_no number(10),old_salary number(10),change_date date); select *from old_salary;

Table OLD_SALARY created.

Query: declare emp number(10);
slr number(10);
temp number(10); dt date;

begin
emp:=&emp; select salary into slr from salary where emp_no=emp;
temp:=slr; select sysdate into dt from dual;

if slr<6000 then

update salary set salary=6000 where emp_no=emp; insert into old_salary values(emp,temp,dt); end if; end;

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Output:

	EMP_NO	OLD_SALARY	CHANGE_DATE
1	1001	5000	14-12-21

	EMP_NO	NAME	SALARY
1	1001	Riya	6000
2	1002	Rima	10000
3	1003	Rekha	6500
4	1004	Dhara	6000