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Class : FYMCA
Roll No : 03
Subject : DBMS
Assignment No : 10

Assignment Title : Write a PL/SQL block for implementing arithmetic operations on any desired database. Make use of function to accept the input and return the result(s) of operation.

OR

Write a PL/SQL block to calculate gross salary on basis of basic salary. If DA is 40% of basic ,HRA is 20% of basic and PF deduction is 12% of basic salary.

Gross salary=Basic Salary+DA+HRA-PF

Accept basic salary from user and pass it to function, function will return gross salary.

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Code :

```
create table employees(EMPLOYEE_ID int PRIMARY KEY,ENAME  
varchar(20),BASIC_SALARY number);
```

```
insert into employees values(1,'shital',40000);  
insert into employees values(2,'amol',39000);  
insert into employees values(3,'Deepak',9000);  
insert into employees values(4,'Mahesh',78000);  
insert into employees values(5,'Vinay',35000);
```

```
select * from employees;
```

```
DECLARE  
BASIC_SALARY employees.BASIC_SALARY%TYPE;  
da NUMBER;  
HRA NUMBER;  
pf NUMBER;  
GROSS_SALARY NUMBER;
```

```
FUNCTION CALCULATE_GROSS_SALARY(p_BASIC_SALARY NUMBER) RETURN  
NUMBER IS  
BEGIN  
da := p_BASIC_SALARY * 0.4; -- DA is 40% of basic  
HRA := p_BASIC_SALARY * 0.2; -- HRA is 20% of basic  
pf := p_basic_salary * 0.12; -- PF deduction is 12% of basic salary  
GROSS_SALARY := p_BASIC_SALARY + da +HRA - pf; -- Calculate gross salary
```

```
RETURN GROSS_SALARY;  
END CALCULATE_GROSS_SALARY;
```

```
BEGIN  
-- Accept basic salary from the user through the employees table  
SELECT BASIC_SALARY INTO BASIC_SALARY  
FROM employees  
WHERE EMPLOYEE_ID = :input_EMPLOYEE_ID;
```

```

-- Call the function to calculate gross salary
GROSS_SALARY := CALCULATE_GROSS_SALARY(BASIC_SALARY);

-- Display the result
DBMS_OUTPUT.PUT_LINE('Basic SALARY:'||BASIC_SALARY);
DBMS_OUTPUT.PUT_LINE('Dearness Allowance :'||da);
DBMS_OUTPUT.PUT_LINE('House Rent Allowance :'||HRA);
DBMS_OUTPUT.PUT_LINE('Providend Fund:' || pf);
DBMS_OUTPUT.PUT_LINE('Gross salary:' || GROSS_SALARY);
EXCEPTION
WHEN NO_DATA_FOUND THEN
DBMS_OUTPUT.PUT_LINE('Employee not found.');
```

.....

Output :

The screenshot shows the Oracle Application Express (APEX) SQL Workshop interface. The browser address bar indicates the URL: 127.0.0.1:8080/apex/f?p=4500:1003:1454045153817751::NO::. The page title is "ORACLE Application Express". The navigation menu includes Home, Application Builder, SQL Workshop, Team Development, and Administration. The current page is "SQL Workshop > SQL Commands". The "Autocommit" checkbox is checked, and the "Rows" dropdown is set to 10. The "Run" button is highlighted. The "Results" tab is active, showing the output of the SQL command. The output text is as follows:

```

Basic SALARY:40000
Dearness Allowance :16000
House Rent Allowance :8000
Providend Fund:4800
Gross salary:59200
Statement processed.
0.01 seconds
```

The bottom of the screen shows the Windows taskbar with various application icons and the system clock indicating 11:50 on 23-04-2024.