PLSQL Lab 6

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Task

1.

1. Create plsql block and to check for all employees using cursor; and update their commission_pct based on the salary

SALARY < 7000 :	COMM = 0.1
7000 <= SALARY < 10000	COMM = 0.15
10000 <= SALARY < 15000	COMM = 0.2
15000 <= SALARY	COMM = 0.25

```
set serveroutput on
----AYA SABRY LAB 6
declare
        cursor emp_cursor is
            select * from employees;
begin
      for emp_record in emp_cursor loop
                if emp_record.salary <7000 then
                  emp_record.COMMISSION_PCT :=0.1;
                elsif emp_record.salary >=7000 and emp_record.salary <10000 then
                  emp_record.COMMISSION_PCT :=0.15;
                elsif emp_record.salary >=10000 and emp_record.salary <15000 then

                  emp_record.COMMISSION_PCT :=.2;
                else
                emp_record.COMMISSION_PCT:=.25;
                end if;
                dbms_output.put_line('Id = '||emp_record.employee_id||  ' , Name = '||emp_record.last_name||' ,Salary
                  update employees
                    set COMMISSION_PCT = emp_record.COMMISSION_PCT
                     where employee_id= emp_record.employee_id;
                     commit;
      end loop;
end;
--select employee_id,COMMISSION_PCT from employees;
```

```
Id = 106 , Name = Pataballa ,Salary 4800 , His COMM. 1
Id = 108 , Name = Greenberg ,Salary 12008 , His COMM. 2
Id = 106 , Name = Pataballa ,Salary 4800 , His COMM. 1
Id = 108 , Name = Greenberg ,Salary 12008 , His COMM. 2
Id = 109 , Name = Faviet ,Salary 9000 , His COMM. 15
Id = 111 , Name = Sciarra ,Salary 7700 , His COMM. 15
Id = 113 , Name = Popp ,Salary 6900 , His COMM. 1
Id = 114 , Name = Raphaely ,Salary 11000 , His COMM. 2
Id = 116 , Name = Baida ,Salary 2900 , His COMM. 1
Id = 117 , Name = Tobias ,Salary 2800 , His COMM. 1
Id = 119 , Name = Colmenares ,Salary 2500 , His COMM. 1
Id = 121 , Name = Fripp ,Salary 8200 , His COMM. 15
Id = 122 , Name = Kaufling ,Salary 7900 , His COMM. 15
Id = 124 , Name = Mourgos ,Salary 5800 , His COMM. 1
Id = 126 , Name = Mikkilineni ,Salary 2700 , His COMM. 1
Id = 127 , Name = Landry ,Salary 2400 , His COMM. 1
Id = 129 , Name = Bissot ,Salary 3300 , His COMM. 1
Id = 130 , Name = Atkinson ,Salary 2800 , His COMM. 1
Id = 132 , Name = Olson ,Salary 2100 , His COMM. 1
Id = 134 , Name = Rogers ,Salary 2900 , His COMM. 1
Id = 135 , Name = Gee ,Salary 2400 , His COMM. 1
Id = 137 , Name = Ladwig ,Salary 3600 , His COMM. 1
Id = 138 , Name = Stiles ,Salary 3200 , His COMM. 1
Id = 140 , Name = Patel ,Salary 2500 , His COMM. 1
Id = 142 , Name = Davies ,Salary 3100 , His COMM. 1
```

EMPLOYEE_ID	COMMISSION_PCT
111	0.15
113	0.1
114	0.2
116	0.1
117	0.1
119	0.1
121	0.15
122	0.15
124	0.1
126	0.1
127	0.1
129	0.1
130	0.1

2.

Alter table employees then add column retired_bonus

Create plsql block to calculate the retired salary for all employees using

cursor and update retired_bonus column

Retired bonus = no of working months * 10 % of his current salary

Only for those employees have passed 18 years of their hired date

```
---AYA SABRY LAB 6 -----
declare
      cursor c_emp2  is
SELECT* FROM employees where (trunc( months_between(sysdate,hire_date) / 12 )) >18 ;
begin
 FOR emp_record IN c_emp2 loop
    update employees
   set retired_bonus=trunc( months_between(sysdate,hire_date))  *(0.1*salary)
   where employee_id= emp_record.employee_id;
   commit;
     dbms_output.put_line('ID = '||emp_Record.employee_id||' , Salary :  '||emp_Record.salary||' Working Years : '||(trunc( months_between(sysdate,emp_record.hire_date) / 12 ))||
      ' ,Retired Bonus:  '||emp_Record.retired_bonus);
    dbms_output.put_line('_____________________ ');

 END LOOP;
END;
/*
ALTER TABLE employees
 ADD retired_bonus number(8,2) default 0;
 */
```

```
ID = 108 , Salary :  12008 Working Years : 20  ,Retired Bonus:  291794.4
_____________________
ID = 109 , Salary :  9000 Working Years : 20  ,Retired Bonus:  218700
_____________________
ID = 114 , Salary :  11000 Working Years : 20  ,Retired Bonus:  264000
_____________________
ID = 122 , Salary :  7900 Working Years : 19  ,Retired Bonus:  185650
_____________________
ID = 137 , Salary :  3600 Working Years : 19  ,Retired Bonus:  83520
_____________________
ID = 100 , Salary :  24000 Working Years : 19  ,Retired Bonus:  559200
_____________________
ID = 102 , Salary :  17000 Working Years : 21  ,Retired Bonus:  445400
_____________________
ID = 115 , Salary :  3100 Working Years : 19  ,Retired Bonus:  72540
_____________________
ID = 141 , Salary :  3500 Working Years : 19  ,Retired Bonus:  80150
_____________________
ID = 200 , Salary :  4400 Working Years : 19  ,Retired Bonus:  101200
_____________________
ID = 203 , Salary :  6500 Working Years : 20  ,Retired Bonus:  159900
_____________________
ID = 204 , Salary :  10000 Working Years : 20  ,Retired Bonus:  246000
_____________________
ID = 205 , Salary :  12008 Working Years : 20  ,Retired Bonus:  295396.8
```

3.

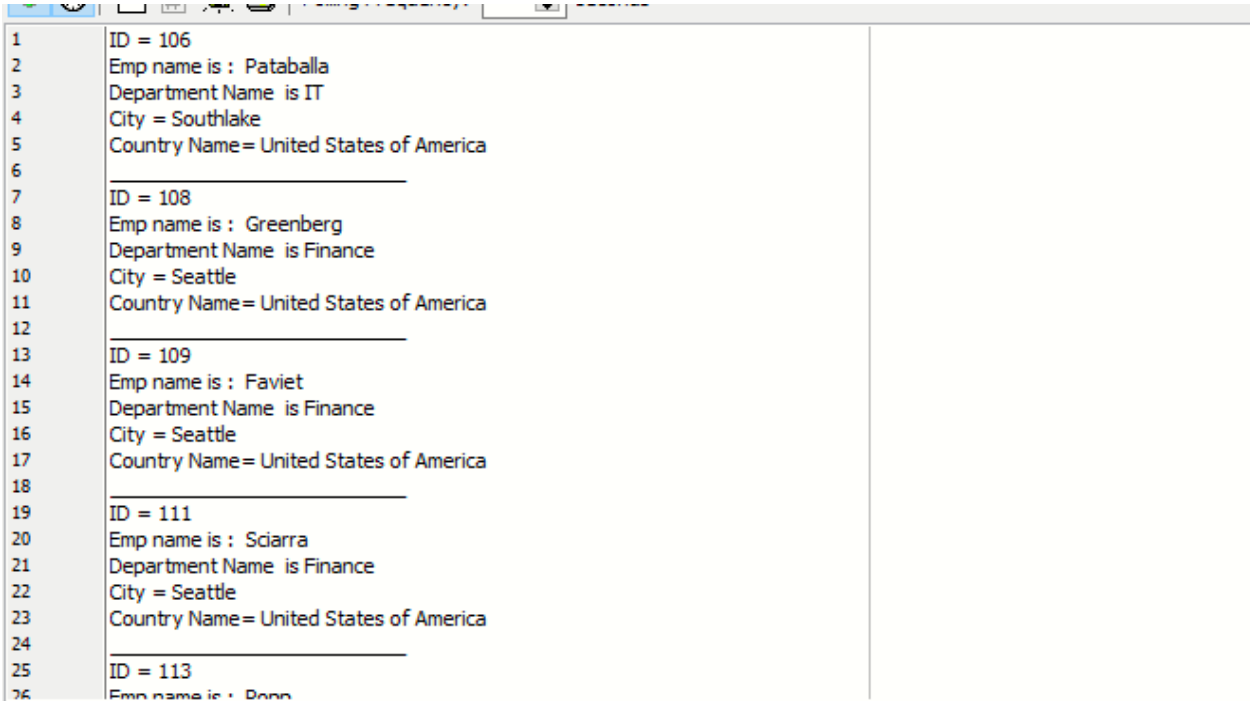
Create plsql block using cursor to print last name, department name, city, country name for all employees employee (without using join | sub query)

```
set serveroutput on
----AYA SABRY LAB 6-------
declare
        cursor emp_cursore is
            select * from employees
            where department_id is not null;
v_LOCATION_ID LOCATIONS.LOCATION_ID%type;
v_department_id number(4);
v_COUNTRY_ID LOCATIONS.COUNTRY_ID%type;
v_city LOCATIONS.city%type;
v_COUNTRY_NAME COUNTRIES.COUNTRY_NAME%type;

v_department_name varchar2(100);
begin

     for emp_record in emp_cursore loop
      dbms_output.put_line('ID = '||emp_Record.employee_id);
      dbms_output.put_line('Emp name is :  '||emp_Record.last_name);
       select department_id
       into v_department_id
       from employees
       where employee_id = emp_Record.employee_id;
       select department_name,LOCATION_ID into v_department_name,v_LOCATION_ID
       from departments
       where department_id = v_department_id;
```

```
        where employee_id = emp_Record.employee_id;
        select department_name,LOCATION_ID into v_department_name,v_LOCATION_ID
        from departments
        where department_id = v_department_id;
        dbms_output.put_line('Department Name  is '||v_department_name);
        select city, COUNTRY_ID into v_city,v_COUNTRY_ID
        from locations
        where LOCATION_ID=v_LOCATION_ID;
        dbms_output.put_line('City = '||v_city);
        select COUNTRY_NAME into  v_COUNTRY_NAME
        from countries
        where COUNTRY_ID=v_COUNTRY_ID;
        dbms_output.put_line('Country Name= '||v_COUNTRY_NAME);
        dbms_output.put_line('_____________________________ ');
   end loop;
end;
```



```
ID = 106
Emp name is :  Pataballa
Department Name  is IT
City = Southlake
Country Name= United States of America
_____
ID = 108
Emp name is :  Greenberg
Department Name  is Finance
City = Seattle
Country Name= United States of America
_____
ID = 109
Emp name is :  Faviet
Department Name  is Finance
City = Seattle
Country Name= United States of America
_____
ID = 111
Emp name is :  Sciarra
Department Name  is Finance
City = Seattle
Country Name= United States of America
_____
ID = 113
```

4.

Create plsql block that loop over employees table and

Increase only those working in 'IT' department by 10% of their salary.

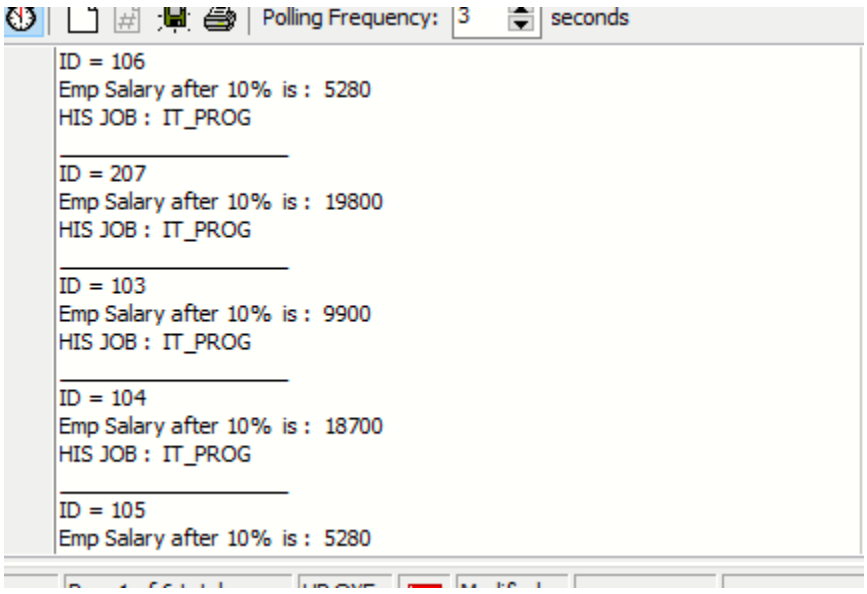
```
set serveroutput on size 1000000
----AYA SABRY LAB 6----
declare

        cursor c_emp1 is
       SELECT* FROM employees WHERE job_id  like '%IT%';
begin
FOR emp_record IN c_emp1 loop
     update employees
   set salary=salary +(0.1*salary)
   where employee_id= emp_record.employee_id;
   commit;

     dbms_output.put_line('ID = '||emp_Record.employee_id);
     dbms_output.put_line('Emp Salary after 10%  is :  '||emp_Record.salary);
    dbms_output.put_line('HIS JOB :  '||emp_Record.job_id);
    dbms_output.put_line('_____ ');

END LOOP;
END;
```

```
ID = 106
Emp Salary is :  4800
HIS JOB :  IT_PROG
_____________________
ID = 207
Emp Salary is :  18000
HIS JOB :  IT_PROG
_____________________
ID = 103
Emp Salary is :  9000
HIS JOB :  IT_PROG
_____________________
ID = 104
Emp Salary is :  17000
HIS JOB :  IT_PROG
_____________________
ID = 105
Emp Salary is :  4800
HIS JOB :  IT_PROG
_____________________
ID = 107
Emp Salary is :  4200
HIS JOB :  IT_PROG
```



5.

Create empty table employees_again2 and use Cursor loop to insert only employees whose job_id = 'SA_REP' to the new table with double salary [salary * 2]

```
--create table employees_again2 as select EMPLOYEE_ID,LAST_NAME, SALARY, JOB_ID from employees where 1=2;

----AYA SABRY LAB 6----
set serveroutput on
declare
cursor c_emp1 is
SELECT* FROM employees WHERE job_id = 'SA_REP';
begin
FOR emp_record IN c_emp1 loop
INSERT INTO employees_again2(EMPLOYEE_ID,LAST_NAME, SALARY, JOB_ID) VALUES
(emp_record.EMPLOYEE_ID,emp_record.LAST_NAME,( 2*emp_record.SALARY),emp_record. JOB_ID);
commit;

    dbms_output.put_line('ID = '||emp_Record.employee_id||' ,Name :'||emp_record.LAST_NAME||', Salary :  '||emp_Record.salary||'  JOB ID:  '||emp_Record.job_id);
    dbms_output.put_line('_____________________ ');
END LOOP;
END;

--select * from employees_again2;
```

```
ID = 150 ,Name :Tucker , Salary :  10000  JOB ID:  SA_REP
_____________________
ID = 152 ,Name :Hall , Salary :  9000  JOB ID:  SA_REP
_____________________
ID = 153 ,Name :Olsen , Salary :  8000  JOB ID:  SA_REP
_____________________
ID = 155 ,Name :Tuvault , Salary :  7000  JOB ID:  SA_REP
_____________________
ID = 157 ,Name :Sully , Salary :  9500  JOB ID:  SA_REP
_____________________
ID = 159 ,Name :Smith , Salary :  8000  JOB ID:  SA_REP
_____________________
ID = 160 ,Name :Doran , Salary :  7500  JOB ID:  SA_REP
```

EMPLOYEE_ID	LAST_NAME	SALARY	JOB_ID
150	Tucker	20000	SA_...
152	Hall	18000	SA_...
153	Olsen	16000	SA_...
155	Tuvault	14000	SA_...
157	Sully	19000	SA_...
159	Smith	16000	SA_...
160	Doran	15000	SA_...
162	Vishney	21000	SA_...
164	Marvins	14400	SA_...
165	Lee	13600	SA_...
167	Banda	12400	SA_...
169	Bloom	20000	SA_...
170	Fox	19200	SA_...
172	Bates	14600	SA_...
174	Abel	22000	SA_...

6.

Using cursor loop to loop over departments and print dept_id, dept_name

```
---AYA SABRY LAB 6---

begin
 for DEP in (select department_id ,department_name  from departments)
 loop
   dbms_output.put_line('Department no : '|| DEP.department_id || ' Department name : '|| DEP.department_name);
 end loop;
end;
```

Data Grid | Auto Trace | DBMS Output | Query Viewer | CodeXpert | Script Output

Polling Frequency: 3 seconds

```
1  Department no : 10 Department name : Administration
2  Department no : 20 Department name : Marketing
3  Department no : 30 Department name : Purchasing
4  Department no : 40 Department name : Human Resources
5  Department no : 50 Department name : Shipping
6  Department no : 60 Department name : IT
7  Department no : 70 Department name : Public Relations
8  Department no : 80 Department name : Sales
9  Department no : 90 Department name : Executive
10 Department no : 100 Department name : Finance
11 Department no : 110 Department name : Accounting
12 Department no : 120 Department name : Treasury
13 Department no : 130 Department name : Corporate Tax
14 Department no : 140 Department name : Control And Credit
15 Department no : 150 Department name : Shareholder Services
```

7.

Create plsql block that insert new Department

With these data

Department_id = 350

Department name = Oracle Dept

Manager id = 103

Location Id = 17

Handle exception as needed