

1) Implement implicit cursor for increasing the salary of employees to 15% of the basic pay.(Salary is the basic pay) for employees working in Computer and IT department. Display the number of affected records

```
BEGIN
  update empsal set salary=salary*1.15 where dept='Computer' or dept='IT';
END;
```

ID	NAME	SALARY	DEPT	DESIGNATION
1	Sneha	20000	Accounts	Non-Teaching
2	Raj	28750	Computer	Teaching
3	Shweta	40250	IT	Teaching
4	Seema	51750	Computer	Teaching
5	Neeta	55000	R&D	Teaching

3 rows updated.

2) Using Explicit cursor display the employee name and department of all employees whose Designation is Teaching.

```
DECLARE
  total_rows number(2);
  name empsal.name%type;
  dept empsal.dept%type;
  CURSOR teachers IS SELECT name, dept FROM empsal WHERE designation =
'Teaching';
BEGIN
  OPEN teachers;
  LOOP
    FETCH teachers INTO name, dept;
    EXIT WHEN teachers%NOTFOUND;
    dbms_output.put_line(name || ', ' || dept);
  END LOOP;
  CLOSE teachers;
END;
Raj, Computer
Shweta, IT
Seema, Computer
Neeta, R&D
```

3) Implement cursor with for loop which inputs employees name and displays the

department name for employees belong in to computer Engineering and IT.

```
SQL> DECLARE
2   n varchar(10):='&name';
3   emp_rec emp_sal%rowtype;
4   CURSOR emp_cur IS
5     select * from emp_sal where dept='Computer' or dept='IT';
6 BEGIN
7   open emp_cur;
8   LOOP
9     FETCH emp_cur into emp_rec;
10    IF emp_rec.name=n then
11      dbms_output.put_line('Name: '||emp_rec.name);
12      dbms_output.put_line('Department: '||emp_rec.dept );
13      EXIT;
14    ELSE
15      dbms_output.put_line('Invalid Name');
16      EXIT;
17    END IF;
18  END LOOP;
19  CLOSE emp_cur;
20 END;
21 /
Enter value for name: Raj
old 2:  n varchar(10):='&name';
new 2:  n varchar(10):='Raj';
Name: Raj
Department: Computer
```

4) Write a Procedure which takes the inputs as numbers and operands and perform the basic mathematical operations..

```
SQL> CREATE OR REPLACE PROCEDURE operation(a IN NUMBER, b IN NUMBER)
2 IS
3 BEGIN
4   dbms_output.put_line ('Addition: ' || cast(a+b as varchar));
5   dbms_output.put_line ('Subtraction: ' || cast(a-b as varchar));
6   dbms_output.put_line ('Division: ' || cast(a/b as varchar));
7   dbms_output.put_line ('Multiplication: ' || cast(a*b as varchar));
8 END;
9 /
```

Procedure created.

```
SQL> EXEC operation(&a, &b);  
Enter value for a: 3  
Enter value for b: 4  
Addition: 7  
Subtraction: -1  
Division: .75  
Multiplication: 12
```

5) Procedure to calculate area of a circle.

```
SQL> CREATE OR REPLACE PROCEDURE area(radius IN NUMBER)  
2 IS  
3 BEGIN  
4   dbms_output.put_line (round(22*radius*radius/7, 4));  
5 END;  
6 /
```

Procedure created.

```
SQL> EXEC area(&radius);  
Enter value for radius: 3  
28.2857
```

6) Procedure to display salary, department and designation when the empid is passed as input.

```
SQL> CREATE OR REPLACE PROCEDURE operation(cid IN NUMBER)  
2 IS  
3   desig empsal.designation%type;  
4   sal empsal.salary%type;  
5   department empsal.dept%type;  
6 BEGIN  
7   select salary,dept,designation into sal,department,desig from empsal where  
id=cid;  
8   dbms_output.put_line('Salary: ' || sal);  
9   dbms_output.put_line('Department: ' || department);  
10  dbms_output.put_line('Designation: ' || desig);  
11 END;  
12 /
```

Procedure created.

SQL> EXEC operation(&cid);

Enter value for cid: 3

Salary: 40250

Department: IT

Designation: Teaching