

DBMS Assignment 3

Q1. Discuss Join in detail. Also explain different types of join with proper example.

Q2. What is the difference between INNER JOIN and LEFT JOIN? Discuss with example

Q3. Write code for following program in PL/SQL

- a) PL/SQL Program for Palindrome Number
- b) PL/SQL Program for Armstrong Number

Q4. Given the relations

employee (name, salary, deptno) and

department (deptno, deptname, address)

Which of the following queries cannot be expressed using the basic relational algebra operations (U, -, x, π , σ , p)?

Q5. Database table by name Loan_Records is given below.

Borrower	Bank_Manager	Loan_Amount
Ramesh	Sunderajan	10000.00
Suresh	Ramgopal	5000.00
Mahesh	Sunderajan	7000.00

What is the output of the following SQL query?

```
SELECT Count(*)
FROM ( (SELECT Borrower, Bank_Manager
        FROM Loan_Records) AS S
      NATURAL JOIN (SELECT Bank_Manager,
                          Loan_Amount
                     FROM Loan_Records) AS T );
```

- (A) 3
- (B) 9
- (C) 5
- (D) 6

Q6. Consider the above tables A, B and C. How many tuples does the result of the following SQL query contains?

```
SELECT A.id
FROM A
WHERE A.age > ALL (SELECT B.age
                  FROM B
                  WHERE B.name = "arun")
```

Q7. Discuss embedded SQL in detail with proper example.