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BATCH: B11

DATABASE SYSTEMS AND WEB TUTORIAL-12

1)

```
mysql>Create database
tut12;  mysql>Use  tut12;
mysql> Delimiter //
mysql> CREATE PROCEDURE fact(IN x INT)
   -> BEGIN
   -> DECLARE result INT;
   -> DECLARE i INT;
   -> SET result = 1;
   -> SET i = 1;
   -> WHILE i <= x DO
   -> SET result = result * i;
   -> SET i = i + 1;
   -> END WHILE;
   -> SELECT x AS Number, result as Factorial;
   -> END//
```

2)

```
DROP TABLE emp_temp;

CREATE TABLE emp_temp AS
  SELECT employee_id,
        first_name, last_name,
        department_id,
        salary   FROM
  employees;

DECLARE
```

```
   CURSOR employee_cur IS
     SELECT          employee_id,
            salary
     FROM emp_temp
     WHERE department_id = 50
     FOR             UPDATE;
   incr_sal NUMBER;
BEGIN
   FOR    employee_rec    IN    employee_cur
      LOOP IF employee_rec.salary < 15000
      THEN incr_sal := .15;
      ELSE
        incr_sal     :=     .10;
      END IF;

      UPDATE emp_temp
      SET salary = salary + salary * incr_sal
      WHERE CURRENT OF employee_cur;
   END LOOP;
END;
```

3)

```
DELIMITER $$
CREATE FUNCTION fibonacci_number(n INT) RETURNS INT
DETERMINISTIC
BEGIN
   DECLARE f_0 INT default 0;
   DECLARE f_1 INT DEFAULT 1;
   DECLARE out_fib INT;
   DECLARE i INT;
   DECLARE f_2 INT;

   SET f_0 = 0;
   SET f_1 = 1;
   SET i = 1;

   WHILE (i<=n) DO
      SET f_2 = f_0 + f_1;
      SET f_0 = f_1;
      SET f_1 = f_2;
```

```
      SET i = i + 1;
   END WHILE;
   SET out_fib = f_0;
RETURN out_fib;
END $$
```

4)

```
DECLARE
CURSOR emp_cur IS SELECT salary FROM emp;
emp_rec emp_cur%ROWTYPE
 BEGIN
 OPEN emp_cur;
LOOP
FETCH emp_cur INTO emp_rec;
EXIT WHEN
emp_cur%NOTFOUND;
calc_totals (emp_rec.salary);
END LOOP;
CLOSE emp_cur;
END;
```