Assignment

Sept23/ DBT/126.1

Database Technologies

Diploma in Advance Computing

September 2023

**Procedure and Function**

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| 1. Write a procedure to accept a string and print all characters in separate lines.   Input: - Ram  Output: - R  a  m |
| drop procedure if exists proc2;  delimiter $  create procedure proc2( \_name varchar(40))  begin    DECLARE str\_len INT;    DECLARE i INT;    SET str\_len = LENGTH(\_name);    SET i := 1;    WHILE i <= str\_len DO      SELECT SUBSTRING(\_name, i, 1) ;      SET i := i + 1;    END WHILE;    end $  delimiter ; |
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| 1. Write a procedure to accept a string and print every character separated by a comm sign.   Input: - SALEEL  Output: - S, A, L, E, E, L |
| drop procedure if exists proc2;  delimiter $  create procedure proc2( \_name varchar(40))  begin    DECLARE str\_len INT;    DECLARE i INT;    declare new\_str varchar(120);      SET str\_len = LENGTH(\_name);    SET i := 1;    set new\_str:=" ";    WHILE i <= str\_len DO    if i >1 then     set new\_str=concat(new\_str,' ,');    end if;     set new\_str =concat(new\_str,SUBSTRING(\_name, i, 1) );      SET i := i + 1;    END WHILE;    select new\_str;  end $  delimiter ; |
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| 1. Write a procedure to accept an alpha numeric string and separate number and characters of the string.   Input: - SAL1234EEL  Output: - SALEEL  1234 |
| DELIMITER $  CREATE PROCEDURE SeparateAlphaNumeric(input\_string VARCHAR(255))  BEGIN    DECLARE str\_length INT;    DECLARE i INT;    DECLARE alpha\_result VARCHAR(255);    DECLARE numeric\_result VARCHAR(255);     DECLARE current\_char CHAR(1);    SET str\_length = LENGTH(input\_string);    SET i = 1;    SET alpha\_result = '';    SET numeric\_result = '';    WHILE i <= str\_length DO        SET current\_char = SUBSTRING(input\_string, i, 1);      IF current\_char REGEXP '^[0-9]$' THEN        SET numeric\_result = CONCAT(numeric\_result, current\_char);      ELSE        SET alpha\_result = CONCAT(alpha\_result, current\_char);      END IF;      SET i = i + 1;    END WHILE;    SELECT alpha\_result AS alphabetic\_part, numeric\_result AS numeric\_part;  END $  DELIMITER ; |
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| 1. Write a procedure to print all employee name and his job in following format.   Input: - KING PRESIDENT  SCOTT ANALYST  Output: - K(ING) is PRESIDENT  S(COTT) is ANALYST |
| DROP FUNCTION IF EXISTS functionname;  delimiter $  CREATE FUNCTION functionname() RETURNS VARCHAR(10000)  DETERMINISTIC  begin   declare x, y VARCHAR(100);   declare z VARCHAR(10000) default "";   declare c1 CURSOR for SELECT ename, job FROM emp;   declare exit handler for 1329 return z;   open c1;   lbl:loop   fetch c1 into x, y;  set z := concat(x, " ", y, " ","\n ", z);   end loop lbl;  end $  delimiter ; |
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| 1. Write a procedure to print all upper and lower characters separately.   Input: - AbCdEfG  Output: - ACEG  bdf |
| drop procedure if exists pro2;  delimiter $  create procedure pro2(input\_str varchar(50))  BEGIN   declare upper,lower varchar (59);   declare l int;   declare i int;   declare curr\_char char(1);   set upper = '';   set lower = '';   set i = 1;   set l = length(input\_str);     while i <= l DO   set curr\_char = substring( input\_str,i,1);    if ascii(curr\_char) between 65 and 90 then      set upper = concat(upper,curr\_char);    else      set lower = concat(lower,curr\_char);    end if;     set i = i+1;     end while;     select upper;     select lower;  end $  delimiter ; |
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| 1. Write a procedure to find the number of vowels, digits and white spaces |
| drop procedure if exists pro2;  delimiter $  create procedure pro2(input\_str varchar(50))  BEGIN    declare vowels int default 0;    declare digits int default 0;    declare white\_spaces int default 0;    declare curr\_char char(1);    declare l int;    declare i int;   set l = length(input\_str);   set i = 1;     while i <= l DO     set curr\_char = substring(input\_str,i,1);   if curr\_char regexp'[aeiouAEIOU]' then      set vowels = vowels + 1;   elseif ascii(curr\_char) between 48 and 57 then      set digits = digits+1;    elseif curr\_char ='' then      set white\_spaces = white\_spaces + 1;   end if ;    set i = i+1;  end while ;  select vowels;  select digits;  select white\_spaces;  end $  delimiter ; |
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| 1. Write a procedure to remove all characters in a string except alphabets   Input: - saleel.bagde123@gmail.com  Output: - saleelbagdegmailcom |
| drop procedure if exists pro2;  delimiter $  create procedure pro2(string1 varchar(128))  begin  declare i int ;  declare l int;  declare curr\_char char(1);  declare output\_string varchar(100);  set l = length(string1);  set output\_string =' ';  set i = 1;  while i <= l DO    set curr\_char = substring(string1, i, 1);    if curr\_char regexp '[a-zA-Z]' then      set output\_string = concat(output\_string,curr\_char);      end if;   set i = i+1;   end while ;   select output\_string as new\_string;  end $  delimiter ; |
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| 1. Write a procedure to insert 10 rows in a table having following columns (using loop).   R (id int, message varchar(20)).  Output: -  id message  ---- -----------  1 i is odd  2 i is even  3 i is odd  4 i is even  5 i is odd  6 i is even  7 i is odd  8 i is even  9 i is odd  10 i is even |
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| 1. Write a procedure to print five highest paid employees from the emp table using cursor. |
| drop procedure if exists proc1;  -- Create a stored procedure  DELIMITER $$  CREATE PROCEDURE proc1()  BEGIN      DECLARE done INT DEFAULT FALSE;      DECLARE emp\_name varchar(45);      DECLARE employee\_salary int;      DECLARE cur CURSOR FOR          SELECT ename, sal          FROM emp          ORDER BY sal DESC          LIMIT 5;  -- Limit the result set to the top 5 highest-paid employees      DECLARE CONTINUE HANDLER FOR NOT FOUND SET done = TRUE;      OPEN cur;      -- Loop through the cursor and fetch the top 5 highest-paid employees      read\_loop: LOOP          FETCH cur INTO emp\_name, employee\_salary;          IF done THEN              LEAVE read\_loop;          END IF;          -- Output employee information          SELECT emp\_name, employee\_salary;      END LOOP;      CLOSE cur;  END$$  DELIMITER ; |
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| 1. Create the following table named (emp10, emp20, and emp30) which have the same structure of emp table.   Write a procedure to split employee records from emp table according to their department numbers and insert those records in the appropriate table using cursor. |
| create table emp10 like emp;  ## partially  drop procedure if exists proc1()  DELIMITER $  CREATE PROCEDURE proc1()  BEGIN      DECLARE done INT DEFAULT FALSE;      DECLARE id INT;      DECLARE emp\_name,username,pwd VARCHAR(255);      DECLARE emp\_dept INT;      declare gender char(1);      declare job varchar(80);      declare hiredate date;      declare sal, comm, bonusid,mgr int;      declare phone varchar(200);      declare isactive bool;      DECLARE cur CURSOR FOR          SELECT \* FROM emp;      DECLARE CONTINUE HANDLER FOR NOT FOUND SET done = TRUE;      OPEN cur;      read\_loop: LOOP          FETCH cur INTO id, emp\_name, gender,job,mgr,hiredate,sal,comm,emp\_dept,bonusid,username,pwd ,phone, isactive;          IF done THEN              LEAVE read\_loop;          END IF;          -- Insert into the appropriate table based on department number          CASE emp\_dept              WHEN 10 THEN                  INSERT INTO emp10 VALUES (id, emp\_name, gender,job,mgr,hiredate,sal,comm,emp\_dept,bonusid,username,pwd ,phone, isactive);              WHEN 20 THEN                  INSERT INTO emp20 values(id, emp\_name, gender,job,mgr,hiredate,sal,comm,emp\_dept,bonusid,username,pwd ,phone, isactive);              WHEN 30 THEN                  INSERT INTO emp30 VALUES (id, emp\_name, gender,job,mgr,hiredate,sal,comm,emp\_dept,bonusid,username,pwd ,phone, isactive);          END CASE;      END LOOP;    END $  DELIMITER ; |
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| 1. Write a procedure to display the department number and employee name in the following format.   Output: -  10 -> (AARAV, THOMAS, CLARK, KING, MILLER)  20 -> (SHARMIN, BANDISH, SMITH, JONES, SCOTT, FRED, ADAMS, FORD)  30 -> (GITA, ALLEN, WARD, MARTIN, BLAKE, TURNER, JAMES, HOFFMAN, GRASS)  40 –> (No employee work in department 40…)  50 -> (VRUSHALI, SANGITA, SUPRIYA) |
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| 1. Write a procedure to accept customer number and display all his order. (Use customers and orders table) |
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| 1. Write a procedure to convert numbers into word   Input: - 45234  Output: - Four Five Two Three Four |
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| 1. Write a procedure to find the sum of digits.   Input: - 5675  Output: - Twenty Three |
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| 1. Write a procedure to find how many “Sundays” are present between two given dates.   Input: - Date1 and Date2  Output: - 3 Sunday’s |
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| 1. Writer a procedure which will accept date and weekday name from the user and print upcoming date on than weekday   Input: - (‘2023-04-26’, ‘Saturday’)  Output: - ‘2023-04-29’ |
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