Assignment

March23/ DBT/126.1

Database Technologies

Diploma in Advance Computing

March 2023

**Procedure**

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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 newLine;  delimiter $  create procedure newLine(in s varchar(20))  begin  declare l int default 1;    lu:loop  if l = length(s)+1 then  leave lu;  end if;  select substr(s,l,1);  set l=l+1;  end loop lu;    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 commaLine;  delimiter $  create procedure commaLine(in s varchar(20))  begin  declare l int default 1;  declare str varchar(20) default "";  set s=reverse(s);  lu:loop  if l = length(s)+1 then  leave lu;  end if;  set str=concat(substr(s,l,1),",",str);  set l=l+1;  end loop lu;  select left(str,length(str)-1);    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 |
| drop procedure if exists sepLine;  delimiter $  create procedure sepLine(in s varchar(20))  begin  declare l int default 1;  declare c char default '';  declare str1 varchar(20) default "";  declare str2 varchar(20) default "";  lu:loop  if l = length(s)+1 then  leave lu;  end if;  set c=substr(s,l,1);  if c between '0' and '9' THEN  set str1=concat(str1,c);  else  set str2=concat(str2,c);  end if;  set l=l+1;  end loop lu;  select s original,str1 numbers,str2 letters;      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 procedure if exists formatemp;  delimiter $  create procedure formatemp()  BEGIN  select concat(substr(ename,1,1),"(",substr(ename,2,length(ename)-1),")"," is ","[",job,"]") name from emp;  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 capNsml;  delimiter $  create procedure capNsml(in s varchar(20))  begin  declare l int default 1;  declare c char default '';  declare str1 varchar(20) default "";  declare str2 varchar(20) default "";  lu:loop  if l = length(s)+1 then  leave lu;  end if;  set c=substr(s,l,1);  if binary c between 'a' and 'z' THEN  set str1=concat(str1,c);  elseif binary c between 'A' and 'Z' THEN  set str2=concat(str2,c);  end if;  set l=l+1;  end loop lu;  select s original,str1 small,str2 caps;    end $  delimiter ; |
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| 1. Write a procedure to find the number of vowels, digits and white spaces |
| delimiter $  create procedure vdw(in s varchar(50))  begin  declare l int default 1;  declare c char default '';  declare str1 varchar(20) default "";  declare str2 varchar(20) default "";  declare str3 varchar(20) default "";  lu:loop  if l = length(s)+1 then  leave lu;  end if;  set c=substr(s,l,1);  if c in ('a','e','i','o','u') THEN  set str1=concat(str1,c);  elseif c between '0' and '9' THEN  set str2=concat(str2,c);  elseif c = " " THEN  set str3=concat(str3,c);  end if;  set l=l+1;  end loop lu;  select s original,length(str1) vowels,length(str2) digits, (length(s)-length(replace(s," ",""))) 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 rmnalpha;  delimiter $  create procedure rmnalpha(in s varchar(50))  begin  declare l int default 1;  declare c char default '';    lu:loop  if l = length(s)+1 then  leave lu;  end if;  set c=substr(s,l,1);  if c not between 'a' and 'z' THEN  set s=replace(s,c,"");  set l=l-1;  end if;  set l=l+1;  end loop lu;  select s ;    end $  delimiter ; |
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| 1. Write a procedure to insert 10 rows in a table having following columns (using loop).   RR (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 |
| drop procedure if exists oddeven;  delimiter $  create procedure oddeven()  BEGIN  declare cnt int default 1;  lbl:LOOP  if cnt > 10 THEN  leave lbl;  end if;  if cnt % 2 = 0 THEN  insert into RR values(cnt,concat(cnt," is even"));  ELSE  insert into RR values(cnt,concat(cnt," is odd"));  end if;  set cnt=cnt+1;  end loop lbl;  end $  delimiter ; |
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| 1. Write a procedure to print five highest paid employees from the emp table using cursor. |
| drop procedure if exists highfive;  delimiter $  create procedure highfive()  BEGIN  declare \_empno,\_sal int;  declare \_ename,\_job varchar(30);  declare c1 cursor for select empno,ename,job,sal from emp order by sal desc limit 5;  declare exit handler for 1329 select "End";  open c1;  loo:loop  fetch c1 into \_empno,\_ename,\_job,\_sal;  select \_empno,\_ename,\_job,\_sal;  end loop loo;  close c1;  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. |
| drop procedure if exists splitemp;  delimiter $  create procedure splitemp()  b1:BEGIN  declare \_deptno int;  declare c1 cursor for select deptno from dept;  declare exit handler for 1329 select "Done";  open c1;  loo:LOOP  fetch c1 into \_deptno;  set @ps=concat("drop table if exists emp",\_deptno);  prepare ps from @ps;  execute ps;  set @ps=concat("create table emp",\_deptno," like emp");  prepare ps from @ps;  execute ps;  set @ps=concat("insert into emp",\_deptno," select \* from emp where deptno=",\_deptno);  prepare ps from @ps;  execute ps;  end loop loo;  close c1;  end b1 $  delimiter ; |
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| 1. Write a procedure to display the department number and employee name in the following format.   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) |
| drop procedure if exists empgrp;  delimiter $  create procedure empgrp()  b1:BEGIN  declare \_deptno int;  declare str varchar(500) default "";  declare c1 cursor for select deptno from dept;  declare exit handler for 1329 select "Done";  open c1;  loo:LOOP  fetch c1 into \_deptno;  set str=concat(\_deptno,"->(");  if \_deptno in (select distinct deptno from emp) then  b2:begin  declare \_ename varchar(30);  declare c2 cursor for select ename from emp where deptno=\_deptno;  declare exit handler for 1329 select concat(left(str,length(str)-1),")") op;  open c2;  loo1:loop  fetch c2 into \_ename;  set str=concat(str,\_ename,",");  end loop loo1;  close c2;  end b2 ;  ELSE  select concat(str,"No employee work in department ",\_deptno,"...)") op;  end if;  end loop loo;  close c1;  end b1 $  delimiter ; |
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| 1. Write a procedure to accept customer number and display all his order. (Use customers and orders table) |
| drop procedure if exists orders;  delimiter $  create procedure orders(\_cnum int)  BEGIN  select \* from orders where cnum=\_cnum;  end $  delimiter ; |
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| 1. Write a procedure to convert numbers into word   Input: - 45234  Output: - Four Five Two Three Four |
| drop procedure if exists numtoword1;  delimiter $  create procedure numtoword1(num int)  BEGIN  declare nu int default num;  declare a int;  declare str varchar(500) default "";  loo:loop  if nu<1 THEN  leave loo;  end if;  set a=nu%10;  set nu=nu div 10;  if a=0 THEN  set str=concat("zero ",str);  elseif a=1 THEN  set str=concat("one ",str);  elseif a=2 THEN  set str=concat("two ",str);  elseif a=3 THEN  set str=concat("three ",str);  elseif a=4 THEN  set str=concat("four ",str);  elseif a=5 THEN  set str=concat("five ",str);  elseif a=6 THEN  set str=concat("six ",str);  elseif a=7 THEN  set str=concat("seven ",str);  elseif a=8 THEN  set str=concat("eight ",str);  elseif a=9 THEN  set str=concat("nine ",str);  end if;  end loop loo;  select str;  end $  delimiter ; |
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| 1. Write a procedure to find the sum of digits.   Input: - 5675  Output: - Twenty Three |
| drop procedure if exists sumofdigits;  delimiter $  create procedure sumofdigits(num int)  BEGIN  declare nu int default num;  declare a,b,c int;  declare sum int default 0;  declare str varchar(500) default "";  loo:loop  if nu<1 THEN  leave loo;  end if;  set a=nu%10;  set nu=nu div 10;  set sum=sum+a;  end loop loo;  if sum<20 THEN  if sum=0 THEN  set str=concat("Zero ",str);  elseif sum=1 THEN  set str=concat("One ",str);  elseif sum=2 THEN  set str=concat("Two ",str);  elseif sum=3 THEN  set str=concat("Three ",str);  elseif sum=4 THEN  set str=concat("Four ",str);  elseif sum=5 THEN  set str=concat("Five ",str);  elseif sum=6 THEN  set str=concat("Six ",str);  elseif sum=7 THEN  set str=concat("Seven ",str);  elseif sum=8 THEN  set str=concat("Eight ",str);  elseif sum=9 THEN  set str=concat("Nine ",str);  elseif sum=10 THEN  set str=concat("Ten ",str);  elseif sum=11 THEN  set str=concat("Eleven ",str);  elseif sum=12 THEN  set str=concat("Twelve ",str);  elseif sum=13 THEN  set str=concat("Thirteen ",str);  elseif sum=14 THEN  set str=concat("Fourteen ",str);  elseif sum=15 THEN  set str=concat("Fifteen ",str);  elseif sum=16 THEN  set str=concat("Sixteen ",str);  elseif sum=17 THEN  set str=concat("Seventeen ",str);  elseif sum=18 THEN  set str=concat("Eighteen ",str);  elseif sum=19 THEN  set str=concat("Ninteen ",str);  end if;  else  set b=right(sum,1);  set c=left(sum,1);  if b=1 THEN  set str=concat("One ",str);  elseif b=2 THEN  set str=concat("Two ",str);  elseif b=3 THEN  set str=concat("Three ",str);  elseif b=4 THEN  set str=concat("Four ",str);  elseif b=5 THEN  set str=concat("Five ",str);  elseif b=6 THEN  set str=concat("Six ",str);  elseif b=7 THEN  set str=concat("Seven ",str);  elseif b=8 THEN  set str=concat("Eight ",str);  elseif b=9 THEN  set str=concat("Nine ",str);  end if;  if c=2 THEN  set str=concat("Twenty ",str);  elseif c=3 THEN  set str=concat("Thirty ",str);  elseif c=4 THEN  set str=concat("Fourty ",str);  elseif c=5 THEN  set str=concat("Fifty ",str);  elseif c=6 THEN  set str=concat("Sixty ",str);  elseif c=7 THEN  set str=concat("Seventy ",str);  elseif c=8 THEN  set str=concat("Eightty ",str);  elseif c=9 THEN  set str=concat("Ninety ",str);  end if;  end if;  select str;  end $  delimiter ; |
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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 |
| drop procedure if exists noofsundays;  delimiter $  create procedure noofsundays(\_start date,\_end date)  BEGIN  declare count int default 0;  declare temp date;  if \_start<\_end THEN  loo:loop  if \_start=\_end then  leave loo;  end if;  if dayname(\_start)='Sunday' THEN  set count=count+1;  end if;  set \_start=\_start+ interval 1 day;  end loop loo;  else  loo:loop  if \_start=\_end then  leave loo;  end if;  if dayname(\_start)='Sunday' THEN  set count=count+1;  end if;  set \_start=\_start- interval 1 day;  end loop loo;  end if;  select count;  end $  delimiter ; |
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